

## ILEA faces its first cutbacks in decade

by David Hencke

The Inner London Education Authority—the country's largest employer of lecturers and teachers—is planning to introduce cuts next year in educational spending for the first time in over 10 years.

A motion proposing full implementation of the Government's committee outlined last week in the Commons, will be tabled on Tuesday by Sir Ashley Durrant, leader of the ruling Labour group on ILEA.

It will be opposed by Mr Moynvyn Scragg, leader of the Conservative opposition group on ILEA's Finance sub-committee, who will call for larger cuts to reduce spending to the 1974-75 level.

The proposals are the first to be announced by a local authority since the Government's circular was released last week. As a pointer to decisions by other authorities, it could mean that 1975 will be the last year to see educational improvements for some time.

The circular states clearly that there will have to be a "cut in the number of pupils" and a "cut in the number of teachers".

Paragraph eight says: "The department's latest forecasts show a net increase in 1976-77 over the current year of some 23,000 pupils in schools, a drop of 74,000 in primary schools offset by an extra 97,000 secondary pupils, and of about 20,000 full-time equivalent students attending further and higher education colleges."

"There will thus be no scope for improvement of standards for the education service at any level, and only by strict economy and efficient planning will it be possible to obviate the need for reductions in standards."

On higher education it adds (para 11): "Where capacity both of staff and of accommodation has in many instances been reached, additional students should be accommodated as far as possible within present resources, and further steps should be taken to tighten staffing ratios."

## AUT to fight unit closure

The Association of University Teachers is to press the Science Research Council to change its mind about closing the London-based Survey Research Unit.

The AUT which represents the majority of academic staff in the SSRC research units will base its case on an agreement made two years ago that any proposal to close the unit should have five years' notice. The SSRC decided recently that it should close in September, 1976.

The survey unit was set up in 1968 to undertake training of researchers in survey methods and later to undertake surveys and research itself.

Earlier this year a committee to decide on a successor to its director, Dr Mark Abrams, was dissolved, after which the unit's money was frozen, the SSRC says.

At the unit an action committee, comprising members of the AUT and the Civil Service, unions has been set up to get the future reorganised.

## Panel will handle funds for oil research

Professor Fred Martin of Glasgow University has been named as chairman of a new Special Science Research Council panel on oil research. The panel will handle funds for research in oil-related developments. The panel has been set up as a result of a report published last week which gives details of existing work but claims it is patchy.

The Social Impact of North Sea Oil Development in Scotland, NCSR, 1974, Avenue, London EC4A 3DU.

## NUS launches campaign to fight spending cuts

by Laura Kaufman

The National Union of Students this week launched a campaign to persuade local authorities to resist the Government's cuts in public expenditure, including education.

The campaign will have two prongs at local level. First, the NUS will urge all educational and public sector trades unions to pass resolutions against the cuts at local councils to be sent to the local authority.

Second, local NUS branches will approach education committees directly and urge them not to carry out the cuts. There will also be local and national demonstrations.

"We expect mass public support," said Mr Charles Clarke, the union's president. "Up and down the country people will say we are not prepared to accept these cuts in public expenditure."

The union already has the support of the Association of Teachers in Technical Institutions, the National Union of Teachers, the Trades Union Congress and public sector unions.

The NUS's campaign this year will have three main planks: a probable basic grant increase of

20 per cent on top of the £845 they asked for last year; an end to local authorities' discretionary powers and also to parental or spouses' means testing.

This year the main rate has been fixed at £740. "We will take no account whatever of the Government's £6 pay limit," said Mr Clarke. "We will simply assess inflation and base our claim on that."

To support their case, the union revealed that 86 per cent of all full-time students do not receive the full grant either from the Government or from their local authority. This is a fact they want to drive home to the public.

There are approximately 550,000 full-time students on advanced courses in colleges in England and Wales. Of these, 400,000 would be entitled to the maximum grant but for the means test, they claim.

Lesser value awards, which can be as little as £24 a year, are given at the local authorities' discretion to 30,000 students, while 20,000 full-time students receive no grant at all.

Mr Tom Driver, general secretary of the ATTI, said that the cuts proposed by the Government would make last year's decision look like a "cut in the eye".

He said that further education was facing the most serious reductions since the end of World War II, and warned that any economies in staffing would be resisted by the ATTI.

He added: "It seems ridiculous to break up groups of skilled people just to meet a short-term crisis, when the economy has only to show a slight upturn for demand to grow again."

The NUS described ILEA's proposals as "horrific". It will mean direct cuts for student teachers to get jobs and further cuts for students receiving discretionary awards.

Another local authority, Hereford and Worcester, will be discussing the Government's circular on Tuesday. Mr Glyn Drew, deputy county education officer, said that cuts in further education spending could be severe. "Each governing body will be left to decide where to introduce cuts after we have allocated the money to each college," he said.

## Polys favour home-based

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become more difficult. But Mr Joseph Churton, director of student welfare services, said he had instructed his accommodation officer not to help students who lived at home to find accommodation. This would help release accommodation available for students from outside Merseyside.

Not all polytechnics, however, are facing the same difficulties although many are finding that accommodation is tighter than last year. Among these are Newcastle, Wolverhampton and Bristol.

Other polytechnics, like Middlesex and Birmingham, say they have so little accommodation that they expect students to find it themselves.

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The NUS Union of Students condemned the move towards more home



## Boom year for CNAA students and courses

by Laura Kaufman

The number of students enrolled for Council for National Academic Awards courses increased last session by almost a quarter over the previous year and the number of first degree courses increased by almost 14 per cent, the CNAA's annual report for 1973-74, which includes figures for students and student enrolments in 1974-75, shows. The CNAA has included in the 1973-74 figures students enrolled in the National Council for Diplomas in Art and Design courses before the merger in 1974. The number of students studying for CNAA awards in the session 1974-75 was nearly 62,000, an increase of 23,501, including the NCAD enrolment. The total number of first degree courses in 1974-75 was 744 compared with 680 the previous year, including that year's 148 NCAD courses. There was a substantial all-round increase in numbers enrolling, especially in arts and social studies, with 21 per cent more first year enrolments. The rate of increase in first year

enrolments in science and technology also increased, from 5 per cent in 1973-74 to 14 per cent in 1974-75, while the number of courses in science and technology increased by 11 per cent.

In art and design, the number of courses increased by 5 per cent over the previous year. First year enrolment rose by 16 per cent.

There was a sharp drop in the proportion of sandwich course students last session, which was partly the result of the fact that 146 of the art and design courses were full time.

In 1973-74, 50 per cent of students were sandwich, 44 per cent full-time and 6 per cent part-time, whereas last year there were 35 per cent sandwich, 59 per cent full-time and 6 per cent part-time.

First degree courses in education rose from seven to 18, the first year enrolment from 435 to 1,716 and the total enrolment from 603 to 2,280. Including last year's 18 art and design courses, there were 86 music degree courses running in 1974-75, compared with 72 the year before.

Council for National Academic Awards Report 1973-74, from 344, 354 Gray's Inn Road, London WC1X 8BP.

## Administrators outline OU's role

The Open University had a significant contribution to make in the training of educational administrators, the committee on the continuing education of the Open University said recently by the British Educational Administration Society.

The society, in a full submission to the committee, said that the Open University had already made a major contribution in the field of educational administration with the second-level undergraduate course "Decision making in British Educational Systems" said the third-level course, soon to be introduced, "Management in Education".

It added that in its future contribution to continuing education in educational administration, there was scope for two kinds of development which would follow on naturally from the first degree course.

First, the university might contribute directly to the training of educational administrators and in-service training of people in educational administration, who because of their previous academic qualifications were not able to take the university's first degree course. The society also suggested that the Open University might provide opportunities for others, not directly involved in education, to gain an appreciation of the organization and administration of the education service and its relationship in aspects of community life.

There was need for initial and in-service training of educational administrators, a field in which significant development had been slow and sporadic, claimed the society.

Progress largely depended on individual interest and local initiative but the Department of Education and Science had been reluctant to take the lead in relation to management training needs of the education service as a whole.

The Open University would be in a strong position to initiate discussions with relevant bodies and academic interests to determine appropriate objectives.

A crucial aspect, the society added, would be the development of training experiences which would contribute to the Open University's recognition of the knowledge, skills and understanding the educational administrator needed.

While education had traditionally been regarded as a national service locally administered, the new post-1968 arrangements for the management of education, which would be of interest to members of the community, said the society.

## Industry urged to woo graduates

Employers in industry should state the purposes of their organizations in each term, in terms of creating wealth, generating income and creating tax revenue, Mr John Garnett, director of the Industrial Society told a 400-strong audience of employers of graduates and careers advisers in Swansea last week.

Speaking at a joint meeting of the standing conference of employers of graduates and the standing conference of university appointments services, Mr Garnett said that good graduates needed to be encouraged to leave university and make a contribution to society by working in industry, and not always be encouraged to stay on to do research.

"We must get young people to understand the problems of industry. Graduates should have experience of working on the shop floor, performing some of the worst jobs."

Members of the appointment services discussed schools, liaison, the code of practice for graduate recruitment, and the use of audio-visual aids.

Joint meetings were held with employers on a range of topics, including the employment difficulties of overseas students, the UK graduates' increasing interest in employment in other parts of the European community, selection methods and equal opportunities.

Professor Alec Rodger from Birkbeck College, London, who developed the seven-point personal assessment plan widely used by employers, judged recruitment literature from 45 employers of graduates.

Assessment was complicated by the great diversity in the aims and resources of the different organizations, he said. He awarded first prizes to the British Rail board, while Unilever and Computer Analysts and Programmers were runners up.

Mr Donald Cook, chairman of the standing conference of employers of graduates, this week proposed a scheme to pay full wages to all students, at little extra cost to the employer.

He suggested that the £740 full grant should be added for taxation purposes to the £3,300 gross income, except in the case of people earning very little. All students would then receive the full grant and would not be dependent on a parental contribution that was not always forthcoming.

Mr Cook, assistant chief of establishments of the Department of Education and Science, said he thought this would avoid the cases of hardship that one sometimes heard about at the universities and would mean that the very best students would make a large contribution to the nation's education by paying tax on their earnings at a high rate.

## Poly launches tenancy scheme to ease accommodation crisis

by Sue Reid

Leicester Polytechnic has set up a special tenancy scheme to help ease the worsening student accommodation problem. Within the scheme Leicester County Council will rent property from private landlords and sublet it to students through the polytechnic.

The scheme, similar to one already being operated by the polytechnic's student union, is aimed at encouraging potential landlords to rent their property to students. It will provide homes for up to 35 students this year, and the union rent scheme, established four years ago, will house a further 100.

Due to a legal complication the polytechnic cannot rent property directly from landlords and so the local authority has agreed to fulfil the role of tenant.

A spokesman for the polytechnic said this week that there had been a considerable response from landlords already and there were hopes

of expanding the scheme next year. The polytechnic decided to introduce the scheme after talks with the students' union, which is predicting that at least 400 first year students will be homeless when they arrive at Leicester later this month.

The union blames the accommodation crisis on the rise in student numbers at the polytechnic and the general depression of the private sector housing market. It claims that the shortage is forcing rents above a level that students can afford.

A campaign highlighting the under use of short-life property has been launched by union members and attempts are being made to find extra student accommodation in the homes of families with children at college outside Leicestershire.

Plans are going ahead to provide cheap beds for homeless students in hall of residence common rooms at the polytechnic as an emergency measure. The union is advocating organized squatting where necessary.



Richard Kindersley, the artist, puts the finishing touches to a cast lead sculptured panel for the University of Exeter's Northcote House student residence.

## Ulster takes the measure of unemployed school-leavers

by Philip Venning

Unemployment among Northern Ireland's school leavers is nearly double what it was last year, but the province has more experience of coping with it than Great Britain.

Several of the emergency measures being brought in by the Manpower Services Commission in this country have been well tried in Northern Ireland.

In August, 1974, 3,822 of the 13,000 children who had left Ulster schools during 1973/4 were still without jobs. This year the equivalent figure was 7,420-3,419 of them girls.

A big cut-back in the number of apprentices being taken on is not such a worry because a large share of training of young people is under direct Government control.

The key is the Northern Ireland Department of Manpower Services. It runs the youth employment service (there is no separate school careers service as in Great Britain) as well as 13 Government training centres, several of which have opened recently as part of a five-year drive to increase training.

Faced with chronic unemployment and low levels of training in the mid-sixties the Government decided to concentrate its efforts on the young.

Unlike the British Skillcentres (which are only now, as part of the emergency measures, opening their doors to 3,300 trainees), the Government training centres are reserved for young people and over half their £14m budget for industrial training is spent on school leavers and the young.

The effort is split between apprenticeship training and special training for unemployed school leavers. Every year the Department of Manpower Services takes on about 1,400 apprentices for a year's off-the-job training in engineering and construction with day release to a further education college.

The apprentices are paid a training allowance of £10.55 a week if they are 16 to 18, or £14.50 if they are 19 or over, and are in training until they complete the training. To encourage engineering employers to take on the craftsmen trained in this way, the department offers them grants for each Government trained apprentice they recruit over and above their normal complement.

Since the scheme started in 1965, 6,348 boys have passed through it, most of them in the past five years. To these must be added an extra 4,223 apprentices who were sponsored by their firms for off-the-job training in the centres, as well as those trained by firms themselves within the scope of the nine industrial training centres.

According to the department, the number recruited to the centres is decided by a survey of each industry's recruitment plans, set against the total need for craftsmen projected by industry and envisaged in the Northern Ireland development plan.

Though Northern Ireland has about seven times more training places for each member of the working population than Great Britain, in 1965 it was well behind. Then only 16 per cent of Northern Ireland school leavers entered apprenticeships compared with 32 per cent in Great Britain.

Last year the figure reached 40 per cent. The department, like the Manpower Services Commission, is also offering them grants for each Government trained apprentice they recruit over and above their normal complement.

With the cooperation of the Amalgamated Union of Engineering Workers it watches the unemployment register for engineering apprentices, and where possible offers them temporary training.

Two of the training centres are reserved for women and offer engineering assembly. To solve the age-old difficulty of finding jobs for those who are non-apprentices, the department has been running a small work creation scheme since 1973 in Enniskillen.

## News in brief

### College head to be PCL pro-rector

Miss Rosamund Byersford, Principal of the Sidney Webb College, is to become pro-rector of the polytechnic of Central London, following her college's amalgamation with the polytechnic in line with the Department of Education and Science ruling on further training.

There will be a new school of education within the polytechnic, based on the present Sidney Webb College, which will be known as the Sidney Webb School of Education. Mr Charles Griffiths, vice-principal of the college, has been elected dean of the new school.

### Post rises hit OU

The Open University is facing a dramatic increase in the cost of sending out course material through the Post Office. The increases, likely to total more than 60 per cent, will put up the cost of sending a second class 750 gpm packet, the weight of most OU University packages, from 26p to 42p on September 29.

As a result of the threat of price rises, the university is investigating alternative methods of delivery including the possibility of using British Road Services.

### £34,000 for the Gaelic

A £34,000 grant to develop an Irish/Gaelic bilingual curriculum for the Western Isles has been announced by Mr William Reid, Secretary of State for Scotland. The project will be managed by Jock Macmillan of the Gaelic League.

### APTII changes name

The Association of Principals of Technical Institutions has changed its name to the Association of Principals of Colleges. The title "College" is more appropriate for the variety of institutions in the association—colleges of technology, of further education, of higher education, polytechnics and technical colleges.

### Fund for books research

The British Library has allocated £10,000 for research in bibliography to be administered by a committee including representatives of all its major library and book organisations.

The research fund has been formed in recognition of the transfer of the work of the former British National Bibliography Ltd to the British Library.

The committee will receive applications for research into books, their use, and the relationship between publishers, libraries and booksellers, with special reference to the use of machines.

The most important is identified as the "pre-development gap" when a new engineering idea has been conceived but the point where it satisfies the academic criteria of the university engineer, but is still far short of the point at which a potential manufacturer would show interest in it as a commercial venture.

The new grant scheme, involving three-way cooperation between the SRC, a university or polytechnic and industry, which might mean a company, a nationalised industry, a Government department or a research association, is proposed to bridge the gap.

It would be analogous to the present "Cooperative" Awards in Science and Engineering" (CASE) postgraduate awards scheme. The report says: "The cost to the SRC probably be larger than that of research grants allowing for industrial contributions."

"It would be for the Engineering Board to decide what proportion of its research grant funds were devoted to pre-development grants. We suggest that no limit would need to be placed on the scheme in this respect in its first year or two of operation."

The report also concludes that a separate scheme should be initiated to support surveys of the "state of the art" in various branches of engineering and their research programmes.

The SRC has had the report since June this year, but has yet made no specific decisions on its recommendations. Before it does so it is anxious to receive reactions to the report and comments should be sent to J. D. Walsh, Science Research Council, Suite House, High Holborn, London WC1B 3JA.

### Urban course donated

The Centre for Urban Studies in Canterbury is to launch a new programme of education in the city of Canterbury as the result of a donation of £11,000. The course will be a two-year programme of planning and architecture for both teachers and laymen.

### Three share course

Students on Bradford University's sandwich courses leading to a BSc in applied biology, medicine, sciences and pharmacy will share a common first year and the elements of their second year course this October. Students will be allowed limited movement to other courses in the first year.



More than 250 dance teachers, choreographers and professional dancers took part in a weekend residential conference on contemporary dance at Warwick University's Arts Centre recently. The leading contributor was Alwin Nikolais, whose dance company is pictured above in a work and the cultural affairs office of the American Embassy.

## Scheme would bridge gap in engineering

by Alan Cane  
Science Correspondent

A new grants scheme to enable university engineers to develop ideas to the point where industry will take an interest is the chief recommendation of a new Science Research Council report published this week.

Entitled *Academic-Industrial Collaboration in Engineering Research*, the report is the work of a 14-man panel under the chairmanship of Professor E. J. Richards, newly retired as vice-chancellor of Loughborough University.

Among their 17 recommendations the panel suggest that centres of engineering excellence in the polytechnics should be identified and supported.

First, a selection of centres would be asked to submit proposals for initial studies to define research programmes within a year, with SRC providing the small backing that would be necessary. After assessing the results, those thought suitable and feasible would be given generous backing for, say, five years with an interim review and monitoring.

The report argues that Science Research Council procedures for supporting research are too cumbersome in some areas. "But in engineering, the picture is far from satisfactory, and there are some very obvious gaps in it."

The most important is identified as the "pre-development gap" when a new engineering idea has been conceived but the point where it satisfies the academic criteria of the university engineer, but is still far short of the point at which a potential manufacturer would show interest in it as a commercial venture.

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## Crowther-Hunt starts campaign for regional coordinating machinery

by David Hencke

A major exercise to find new regional machinery to coordinate the public sector of further and higher education was launched by Lord Crowther-Hunt, Minister of State for Higher Education, on Friday.

Addressing the annual meeting of the Standing Conference of Regional Advisory Councils (SCRAC), he urged local authorities and other interested parties to come forward in reply to a consultative document issued by the Department of Education and Science last week. All local authorities, trade unions and professional associations have been sent the document together with detailed proposals for new machinery put forward by the council of local education authorities earlier this year.

Lord Crowther-Hunt told the conference at the Crow and Alsager College of Higher Education that no decisions were likely to be made before the Government had received the report of the Layfield committee on local authority financing and the devolution proposals for Scotland and Wales had been announced.

Any new machinery, which would include control of teacher training courses previously carried out by university area training organisations, would have to be advisory, flexible, influential and effective.

He gave a strong hint that the outcome of the Welsh devolution proposals, particularly a decision whether higher education should be run by the Welsh assembly, would affect the future of proposals for devolution to regional councils to be put forward for England at a later date.

Outlining the present debate on regional structures for higher education he said many organisations had put forward plans. These included the Advisory Committee for the Supply and Training of Teachers, which had proposed interim committees for induction and in-service course coordination; the Committee of Local Education Authorities which had proposed a completely new structure to cover the whole field; and SCRAC, which had made similar proposals to CLEA and the national advisory council for industry and commerce.

Local authorities should not be concerned that the new regional machinery would have no statutory powers. "The University Grants Committee has not even a statutory existence since it was established by a Treasury note but no one would argue that it is ineffective," he said.

He also hinted that although the new regional body would not have executive powers he was interested in developing some of the DES's planning roles to the new regional councils.

Reaction to the minister's proposals was mixed. Sir Alex Smith, director of Manchester Polytechnic and chairman of the Committee of Directors of Polytechnics, said he was worried that the new machinery would be just another set of advisory committees because there was no clear idea of an overall philosophy for the public sector of higher education.

Mr John Tomlinson, chief education officer for Cheshire, however, said the consultative document was "a glimpse into the future", signalling the beginning of the end of the binary system. He warned that there were several major

threats to local authority involvement in further and higher education, arising from the economic crisis.

He could not see further financial control being passed to local authorities at a time when the Government was seeking to severely limit local authority spending. He also saw devolution in Wales as a possible threat to the power of local authorities since it could be decided by authorities themselves whether to leave or to join the regional services, but to leave that to regional authorities.

He also thought that demand from local authority institutions for more autonomy could lead to moves for a national system of higher education.

The DES document asks for comments by the end of November on CLEA's proposals for a single watchdog body, called a Further Education Advisory Council in the Region, Philip Venning writes.

It is in interim regional committees to cope with teacher training should be set up while the new bodies are established and if the councils should have any financial control over the colleges in their region and whether the DES should pay for half their activities as suggested.

Comments are also invited on whether there should be a national council overseeing the regional ones; on the relationship of the councils with universities in their regions; and on the terms of reference and constitution of the councils.

Earlier this year CLEA, secretary of the regional advisory councils and the old area training organisations should be replaced by single, advisory bodies.

However, the survey points out that job openings in design, research and development are showing little expansion over 1974. The number of openings in research have risen by only five per cent since 1974 and in design by just two per cent.

The survey figures are based on interviews with employers earlier this year and may be up to nine months out of date.

Haymarket Survey of New Graduate Salaries and Prospects, Haymarket Publishing Limited, Dean Street, London, W.1. Price £30. *Director of Opportunities for Graduates*, Haymarket Publishing Limited, distributed free to final year undergraduates.

Mr. Donald Cook, chairman of the standing conference of employers of graduates, this week proposed a scheme to pay full wages to all students, at little extra cost to the employer.

He suggested that the £740 full grant should be added for taxation purposes to the £3,300 gross income, except in the case of people earning very little. All students would then receive the full grant and would not be dependent on a parental contribution that was not always forthcoming.

Mr Cook, assistant chief of establishments of the Department of Education and Science, said he thought this would avoid the cases of hardship that one sometimes heard about at the universities and would mean that the very best students would make a large contribution to the nation's education by paying tax on their earnings at a high rate.

The Open University could contribute to this in a major way through high quality courses relating to the management and administration of education, which would be of interest to members of the community, said the society.

He suggested that greater efforts were needed to keep 16-18-year-olds at school or at further education colleges. New training schemes for this age group were also needed.

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## Graduates face bleak jobs prospects

by Sue Reid

Recruitment prospects for graduates in 1976 may be bleak, with employers in some regions cutting back dramatically, this year's Haymarket Survey of New Graduate Salaries and Prospects has forecast.

The survey interviewed 259 employers and suggests that there has been a fall of up to 50 per cent in recruitment into textile firms, 30 per cent into local government and 35 per cent into the gas, electricity and water industries compared to 1974.

The worst hit areas in the near future are likely to be Ireland, Scotland and the North West, claims the survey, while demand in the South West and Midlands may actually increase.

Demand for arts and social science graduates has slumped by 18 per cent since 1974. It adds that employers are still anxious to recruit economists and business studies graduates.

There has been an increase in recruitment of 50 per cent in the scientific services, 25 per cent in chemicals and allied industries, and 24 per cent in the distributive trades.

The 1975 Haymarket Directory of Opportunities for Graduates, published this week, clarifies the picture by indicating that more companies are seeking to employ graduates in engineering and technical subjects than in any other.

It goes on to confirm the decline in opportunities for arts and social science graduates, but puts most of the blame on employers who have emphasised the opportunities in technical areas when they are equally eager to recruit graduates from any discipline.

The average starting salary for a graduate entering employment in industry this year is likely to be £2,030 per annum, an increase of 15 per cent over 1974. Graduates entering finance or accountancy will receive the lowest starting salary of about £1,973 per annum.

The directory says the employers' booklets often start by listing their specific requirements, such as for chemists, engineers, and economists and then include a section for graduates of other disciplines for marketing, sales, production and finance at the end. However, this last category, it adds, may be the largest both in the number of vacancies and in the variety of jobs.

The job functions offering most new openings to graduates are personnel and management services, closely followed by sales, marketing, production, manufacturing, finance and accounting. Posts in personnel and management services have risen by 20 per cent since 1974 and the number of jobs in management services have risen by 19 per cent in the same time.

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# DipHE students have nowhere to go if they want to take degrees

The lack of suitable degree courses available for successful students to transfer to at the end of a two-year Diploma in Higher Education course was highlighted at the National Conference on Geography in Higher Education at Oxford last week.

Mr David Mobbs, chairman of modular courses at Oxford Polytechnic, said that DipHE students who chose to study a certain range of subjects including geography and biology, were often frustrated because there were no degree courses for them to transfer to at their own individual colleges, and few other colleges were willing to take on students in the third year.

However, he said that if development of the DipHE was allowed to continue and movement between colleges encouraged, a wide range of third year options would be made available to students. This would also enable colleges to concentrate and develop particular specializations.

The polytechnics and bigger colleges should consider to what extent their honours degree courses were suitable for people with DipHE qualifications because a large number of students would be coming on to the education market at this stage. He suggested that polytechnics might provide special bridging courses in summer vacations for DipHE students waiting to join the third year of a degree course.

Advocating modular degree courses as a way of giving individual students freedom of choice Mr Mobbs said they also allowed a change of academic programme as students' interests and knowledge developed.

There was a need to strengthen a system of higher education where individual students could develop their potential and choose their own direction at many stages. This system should accept different rates of progress and goals, and provide for a lifelong education. Only the modular system seemed to satisfy these aims, said Mr Mobbs.

He added that the modular idea was particularly appropriate for

part-time students and said Oxford Polytechnic had already experienced an increasing demand from producers and teachers hoping to take post-experience courses through it.

Mr Ted Lewis, acting dean of Middlesex Polytechnic, said that decisions on the changes in further and higher education were taking place in a piecemeal fashion.

He claimed that the reorganization of further education establishments and colleges of education was directly affecting 230 institutions in Britain at a time when the polytechnics themselves, of which more than 20 were involved in an amalgamation, had hardly settled down following their designation in the 1960s and early 1970s.

Adjustment to the changes presented many problems especially when the aim was to weld separate and different colleges into single, larger education units, he said.

He also spoke of the matrix system of academic organization at Middlesex Polytechnic, developed following its formation from five separate colleges. It was a system, he maintained, that secured flexibility of staff and development of courses in a polytechnic anticipating growth and change.

Unlike the traditional departmental system which located staff, courses and students by faculty, the matrix system, he said, was a system of shared resources. It was a system of shared resources. It was a system of shared resources.

## CNAA emphasises importance of joint research projects

An important aim of the Council for National Academic Awards was to encourage joint research projects between polytechnics, colleges of education, and industry, the conference was told.

Mrs Ann Ridler, senior academic registrar of the CNAA, speaking on resources for research in polytechnics and colleges, said that the council's regulations emphasized the value of collaborative research projects and a large proportion of the current research registrations were already of this type.

Mrs Ridler added that the CNAA's attitude reflected the views of the Department of Education and Science, which in the 1960s said that it was necessary to make provision for polytechnic research.

The DES thought research was essential for the proper fulfilment of the polytechnic's teaching functions and the maintenance and development of close links with industry, particularly local industry.

It also underlined the value of collaborative research projects and a large proportion of the current research registrations were already of this type.

Mrs Ridler said the CNAA's view was that research should be widely varied, although for the supervision of undergraduate projects work staff research needed to be highly relevant.

It had been the CNAA's practice to encourage the inclusion of some form of individual study by students in the final year of post undergraduate courses.

This work formed valuable pre-

paration for students intending to continue with postgraduate research.

Research experience was important and the council was not willing to approve postgraduate courses where staff had inadequate research experience.

It was partly for this reason, maintained Mrs Ridler, that postgraduate courses in geography had been slow to develop.

Of the 1,600 research students currently registered with the CNAA only 17 were for projects which could be classed as geography, and only three of these were lecturers.

This was an extremely small proportion representing scarcely more than 1 per cent.

However, 43 of the council's approved degree courses included geography, a total of 900, which represented 6 per cent.

Mrs Ridler said the report of the council's working party on resources for research in polytechnics and colleges, published last year, stressed that institutions should assume staff would undertake some form of research as this helped to sustain teaching. It also said that colleges should allow more time for research and collaboration with industry.

Professor John Goddard of Newcastle University, told the conference that data used in research should be made available to students. This, he maintained, would speed up the process of diffusing research information and provide opportunities for students to analyse data in practical classes.

Research findings, he said, "trickled down" to undergraduate students by way of references in lectures to academic papers, or more generally through pointed descriptions in textbooks. This was a slow process, he said, and research findings were moving forward rapidly.

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## Modular courses attacked as too fragmentary and flexible

The growth of modular courses in universities and polytechnics may hinder the development of interdisciplinary work, Dr Geoffrey Squires, of the Nuffield Foundation, warned last week. He told a symposium on interdisciplinary courses in European education that the two academic structures were incompatible.

The symposium in London, the second to be organized by the Society for Research into Higher Education, was discussing the basic principles of interdisciplinary work. Dr Squires raised the question of modular courses and their role.

He suggested that there was too much fragmentation, choice and flexibility within modular courses for them to be happily connected with interdisciplinary structures.

However, the structure of higher education in Britain had been simply formal much less interdisciplinary work would have been introduced, he added. Negotiations between departments had led to the formation of interdisciplinary courses.

He suspected that many disciplines were more divisible than academics tended to believe, and if Britain had traditionally had a different form of academic structure, perhaps based on course units, the concept of rigid disciplines might be changed.

Dr Squires told the symposium, attended by academics from France, Germany, Holland, Sweden, Denmark and Finland, that the concepts of interdisciplinary thinking were naturally familiar to continentalists.

Taking up a point made by Professor Guy Berger, of the University of Paris, who had earlier raised the question of how interdisciplinary work influenced higher education teaching, Dr Squires said that the normal unwritten rules of priority were broken through interdisciplinary work.

People were brought together to work on courses and their differences, styles of teaching and even political assumptions were exposed. Interdisciplinary work, he said, could create significant changes. Academics moving in the same domain shared enough assumptions for things to be done tacitly, but once one had to work with people from other domains there was a need for explicit language.

Professor Berger also outlined the work being carried out in France in connection with interdisciplinary work. While stressing its

advantages, he warned that its flexibility might be a danger. There was an uneasy feeling among researchers that within interdisciplinary field one could do just about anything and in the end return to the traditional way of thinking.

Mr Duncan Conway, of Hatfield Polytechnic, described the interdisciplinary work which has been developed over the last three years at the Centre for Operational Research Studies at his polytechnic. He said efforts had been made to create within a higher education institution a truly interdisciplinary activity which complemented the operational research groups of government and industry.

From his experience of interdisciplinary work at Hatfield Polytechnic, Mr Conway was able to pinpoint the general formula for success.

He stressed that full-time staff involved in any interdisciplinary scheme should be fully committed to the concept or else it would collapse and added that there should be a clear focus of interest for an interdisciplinary group.

The problems facing interdisciplinary work in Holland were described by Mr Hans van der Linden and Mr Jos Aarts, both of the University of Nijmegen in the Netherlands.

They pointed out that within the Dutch university system the faculties were held responsible for education and research conducted within their province, and in this respect they enjoyed an autonomous authority.

But, they added, because each functioned as separate units alongside each other and were separated in terms of mono-disciplines the taking of initiative for interdisciplinary education was seriously hampered.

The Nuffield "Science in a Social Context" project was outlined to the conference by Dr David Edge, of Edinburgh University.

He said that three British polytechnics and eight universities had been involved in the project. Its main task had been the distribution of materials, already in use in science and society courses, in printed form suitable for wide distribution.

Serious evaluation of the project was not yet possible because experience of the units was limited and also because much depended on the particular teaching team and institutional situation.

Warwick takes £1m

Warwick University was awarded research grants totalling £1m during the last financial year. The largest was from the Computer Board, which gave £425,000 for the development of a new central computer system. Grants were also awarded by the Science Research Council and the Cancer Research Campaign.

Maths for the mature

Paisley College in Scotland is to run a preparatory course in mathematics for mature students interested in taking degrees. University of Edinburgh is to run a similar course for students who have not taken mathematics at school.

Food study awards

Industrial cooperation has resulted in two scholarships being offered to undergraduate students undertaking a new course in food processing at Loughborough University.

## Don's diary

### Monday

6.10 am:—Start from the house to catch the 8 o'clock Pullman to the Open University and BBC studios for Alexandra Palace to film an Open Forum programme covering my SSRC project on the learning difficulties of early school-leavers.

The camera work is out of focus because of the colour conversion taking place. Blowing a gale on the top of the hill but by 5.30 pm the sequence is complete, though I learn that the preface to my contribution will be a trailer on a "Tawny Owl" film which won second prize at the Japan Festival.

A confident and professional performance by Bob Rowland, head of BBC Productions, and former editor of *Panorama*, introduced the Owl clip. Afterwards viewers said that they simply loved Bob and the Owl, but "the sociologist fellow" kept using phrases like "socio-economic class" (at least three times) and would the workers or early school leavers know what it was all about?

However, the research has gone well over the past year, especially the Mussey-Perguson shop-floor group.

### Tuesday

Spend the morning monitoring students' assignments to see whether the tutor has commented adequately and marked appropriately. By lunchtime I have cleared most of the dreary backlog.

Manage to add three more paragraphs to a paper I am writing for a sociology of religion conference in Spain and read a chapter of a book before setting off to attend a tutorial in a remote part of the North West Region. After a sticky, crowded drive I find the study centre, though the precise location of the room where the students are supposed to be evades me.

Where, in God's name, have they got to in this large and terrifying technical college, seemingly abandoned in the summer evening? Has the regional office in Manchester made yet another administrative error?

I spend half-an-hour stumbling through lathes and machine shops until I eventually hear voices emanating from behind a pile of oil rags. I've found my students—all

the settlement for further education teachers traditionally follows that of school teachers decided in the primary and secondary Bursary negotiating committee.

At a meeting last week no offer was made to secondary teachers in the last financial year. The largest was from the Computer Board, which gave £425,000 for the development of a new central computer system. Grants were also awarded by the Science Research Council and the Cancer Research Campaign.

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Warwick University was awarded research grants totalling £1m during the last financial year. The largest was from the Computer Board, which gave £425,000 for the development of a new central computer system. Grants were also awarded by the Science Research Council and the Cancer Research Campaign.

Maths for the mature

Paisley College in Scotland is to run a preparatory course in mathematics for mature students interested in taking degrees. University of Edinburgh is to run a similar course for students who have not taken mathematics at school.

Food study awards

Industrial cooperation has resulted in two scholarships being offered to undergraduate students undertaking a new course in food processing at Loughborough University.

### Wednesday

Another early morning start. This time to a conference at Oxford. I appreciate it more now than the time I spent there. Lunch and dinner with Frazer (who happened to sit next to me). We talked of consciousness and awareness over roast chicken and black cherry pie. His account of his imprisonment in Brazil was, perhaps, not unreminiscent of confinement to some of the Oxford colleges and their medieval accommodation.

Took the opportunity of visiting one of my mentors, Bryan Wilson, at All Souls, to catch up on the academic gossip (which dare to assume no more prevalent among sociologists than other academics). Reflections on "those who have influenced me most" as teachers. Perhaps only three, including Bryan Wilson, the other two being Peter Worsley and the philosopher, Alan White.

Others, later, certainly exerted enormous influence and impression. Ninian Smart, for example, with his erudition, with his incredible knack of writing a chapter or an article while at the same time talking to you about the involvement of a drink. Or Peter Worsley, whose lasting image is of a man who under his left arm clutches a recording of *Les Grands du Jazz*, and in his right hand *Rupert and the Firebird* and *Elizabethan Love Lyrics*. These are the scholars who helped to make me what I am now.

Heading back from the conference, I was apprehended by three plain clothes police who suggested that I resembled uncannily the description of a man who had stolen some silver from Blenheim Palace earlier in the week. Having convinced them of my innocence in that respect, at least, and provided them with an unshakable alibi (my

own words) I was released. I was then taken to a local radio BBC programme. I feel like *Texaco* does over Liverpool, the excitement over the anticipated visit, the unique vigour of the Merseysiders; the most beautiful city on earth, perhaps local radio is, after all, the grassroots of it all.

See Michael Drake, my dear, who appears to have given up wearing his boilersuit. We have a drink in one bar and then I go off to another to meet two of my OU colleagues, Kevin Monney and Vince Houghton. We stay there until we are thrown out. Everybody else seems to be away, in Creta or South America or Tristan da Cunha.

Arrive home late and weary to find my wife having a party with a Gingerbread contingent. Never forgetting that I am a sociologist I, despite my weariness, enter into the spirit of the evening, while at the same time keeping careful notes of the social interaction in a small kitchen. The Gingerbread ladies, the OU senior counsellors, who study on the floor, the telephone rings eight times with calls from tutors and students, and the last one-parent family visitor slinks out of the door at 3 a.m.

Japan represented only an exaggeration of both the American and the European systems. Acknowledging this does not imply a jumble of levels or a super market where anything picked up after school is called "higher education". Yet it does recognize that young persons learn elementary Greek, scientists learn elementary German and Russian.

The Open University, the possible prospect of "open colleges", increasing permeability between all kinds of post-secondary provision, and more frequent return to learning for community and personal as well as professional reasons, all show that we are on the threshold of a new era.

However resourceful that provision may be organisationally, it may nevertheless remain an educationally indifferent supermarket unless care is taken to recognise, foster, and enlarge talent with all the implications of living in a "communications society".

Critical changes of attitudes towards excellence and the evolution are consequently necessary in schools. Most of all, at the immediate post-compulsory level (either by age or attainment) opportunities for a fresh start, reorientation or reflection seem necessary.

The first "young adult" steps towards academic and professional excellence may well be provided in a first-tier junior or "community" college without prejudice to the cultivation of talent, then or later.

Edmund King

Dr King is professor of education at King's College London.

years of reading detective fiction had not, I was glad to say, gone unwasted. I was allowed on my way.

"If it was Liverpool", I had muttered, "you would have something better to do."

"If it was Liverpool, sir", they had replied, "you would now be up against a wall."

Then on to a local factory to try to encourage the men, shop-floor workers to enroll in our shop-called "University of the second chance", but whose students are comprised mainly of the solid middle class.

The 30 per cent of the OU student body who are teachers clearly pursue their three credit exemptions as 30 per cent of their degree—and some additional increments. Nobody is blaming them although some of us wish that they might go somewhere else, but where else is there for them to go?

On to a party at Roger McGough's. Full of the arty Mersey scene—Henri, Dooley and co. But good, clean, though a trifle uninvigorating. Ken Roberts and Steve Westacott meet me afterwards for a brief chat. I feel like I have covered groups singing away much hotter than the Detroit Emeralds or the Supremes.

Remnants of forgotten days of the Streets and Cavern when the Mersey scene was at its height. But Roger says we were around then but didn't notice it.

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The students are enthusiastic, at least to begin with. A slight problem arises when a group of them complain to me that they had been informed. They had come with the impression that it was a "dyke week" at the summer school. They presented a particular problem to those tutoring on the "Women in Society" module, for obvious reasons, both in physical appearance and in their intellectual stances.

The problem was resolved by the middle of the first week when they appeared to find satisfactory partners. At the Disco the TV camera was present and so we warned students before they went in. After all, it might well be embarrassing when they got home to hear: "Daddy, who is that man you were dancing with last party?" Or alternatively, "Daddy, who is that fellow who appears to be kissing you?"

Mind you, the dykes could come in useful as legitimate excuses for apparently deviant behaviour. I make a mental note to write a paper on "Pairing and Bonding Relationships in an Artificially Induced Setting".

Even there I was not safe from the telephone. At 11.15 pm. I am dragged out of a party but I make it. She tells whoever it was—it might have been my regional director—that I have just gone to Thailand for a sociology of medicine conference. When we return to the party she informs me, again, that I will have to change my academic career pattern.

I have changed my career pattern, and have accepted a professional post as director of studies at Ulster College, the Northern Ireland Polytechnic. Don the Flak Jacket. All things being equal, however, it will be good to have a department again, students to see, academic camaraderie, courses to design and to teach on.

On reflection, seeing my post advertised is reminiscent of my more recent experience. As the old song says, "remember the good things", and the OU was good and exciting in the beginning.

Where else would one see Professor Tommy Room, FRSE, wielding a senior counsellor's mallet, study centres during the postal strike, six academics sharing one small study, or even, and perhaps most importantly, the tremendous motivation and enthusiasm of the OU's students? Those are the lasting memories I shall carry with me to Ulster.

The author is currently staff tutor in Sociology, North West of England Faculty of Social Sciences, Open University.

Kenneth Jones

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Professor Ellyn Richards, former vice-principal of Loughborough University, sings the praises of the old colleges of advanced technology, and bemoans the 'political weakness' of the CVCP as he talks to Alan Cane

## 'Polys should never have been created'

Most of the former colleges of advanced technology have been universities for almost a decade now, and there is a rash of retirements and impending retirements among those responsible for turning the cream of the old further education system into respected, competitive, technologically-oriented universities.

They include Leonard Rodierham at Bath, Sir James Tait at City, R. A. Smith at Heriot-Watt, D. M. A. Leggett at Surrey and Ellyn Richards at Loughborough.

Vice-chancellors of all ex-CATs faced a tough task to achieve acceptance for their institutions with none of the advantages of instant academic credibility enjoyed by the wholly new universities which started from scratch. So what was like to be a vice-chancellor of an ex-CAT in those turbulent years?

Professor Ellyn Richards retired from Loughborough University at the end of this past session, and now returns to research at the Institute of Sound and Vibration at Southampton University, the unit he established in 1962 and of which he was director before accepting the Loughborough vice-chancellorship.

His attitude to eight years at Loughborough is a mixture of intense pride in what the university achieved in that time and measured regret that because political support of the new polytechnics and denigration of the universities has been the watchword of the last decade, the ex-CATs have never had the public recognition they deserve.

"I think it has been a great success story and if it were not for the fact that politically it is wrong to sing the praises of the ex-CATs, I think we would be sung very highly," he says.

In 1969, the government said it would provide the money to build up technology in the universities, but many of them said: "Oh no, we are not going to get out of balance, technology must not dominate the situation." The government therefore established the colleges of advanced technology just when the universities were really getting into their stride in technology, and that created competition for places.

With another change of government, it was decided that the universities still were not doing their

stuff; the ex-CATs had become universities in accord with Robbins in the meantime and ceased to be appreciated. The government therefore decided to formulate still another kind of body from those that had not become CATs and these were to become the polytechnics.

He has trenchant views on the establishment of the polytechnics. "There was no need for them at all. On the contrary, they are highly dangerous because by emphasising university equivalence they are going to expand the grave middle-level sparsity of effort, a level which is the key to a good industry. In any teaching system, the teachers will always want to teach the top level; they will never really be satisfied with teaching Ordinary National Certificate if there is higher degree work going on.

"So the polytechnics were a thoroughly bad idea, and they should not have been necessary; the ex-CATs were doing well in technology and could have been expanded cheaply to deal with any shortage of places for engineering students. The universities were moving towards most of the things like part-time courses which are now being done by the polytechnics."

"I say this, Loughborough is the premier polytechnic, full stop," Professor Richards argues, going on to point out that the ex-CATs moved forward from the moment they left the public sector and became self-determining. "Provided you can build in a factor to prevent universities from becoming dominated by the reactionary 'sit back' elements, the private sector is undoubtedly the best way to keep abreast of the times," he says.

"The CATs would not have moved forward much in the public sector since initiative and reward are most closely related in private enterprise. I put the question to my senate the other day: 'Will those of you who believe that we should consider going back to becoming a polytechnic please show your hands?' Only one hand was raised."

One of the more traumatic experiences for a new vice-chancellor of an ex-CAT must have been membership of the Committee of Vice-Chancellors and Principals, a small,

closely knit body which found itself virtually doubled in size in a matter of years.

Professor Richards has always regarded himself as playing a lone hand on the CVCP, which has neither, for example, chaired any of its working groups or committees—and regards the committee with both respect and pessimism.

"It is a wonderful learning system for a new vice-chancellor. Most of the problems we discuss associated with universities have been dealt with elsewhere and the chances are that you will not be the first to face any particular problem."

"The real snag with the Committee of Vice-Chancellors and Principals is that individual vice-chancellors are never sure whether they are talking as chief executives of their university or as chairman of their senates, and indeed some tend to play games with this sort of situation."

"They sometimes seem to be in agreement on a certain attitude, but when taken by the CVCP but then the senate of their university goes right against it."

"It is wrong that senates should feel entitled to take their own attitudes in areas where a national attitude is manifestly needed."

He feels that the CVCP is not yet active enough in fighting for the universities: "Lawyer attitudes are all very fine in normal times but not when we are fighting for our lives—and we are, let there be no doubt about that."

"I believe the universities should be much more positive about their attitudes to their educational development than they are. In adult and mid-career education, teacher education, research and finance they should be fighting hard now and not letting the situation flow over them. The challenge to the universities is greater now than it has ever been and it is devastatingly wide."

I believe we should not grow much more for 18-year-olds but there should be a better system for educating mature students. The Open University is a wonderful organisation but in the last analysis it must be recognised as only a correspondence course with very little inter-student discussion; its success should be taken as an indication that there is another additional

role for the universities in mid-career and in leisure.

"But the universities continue to push the same old three-year degree course plus MSc courses plus PhD courses, the same old educational syndrome. There should be much more positive thinking about where the universities as a whole should be going."

He added: "But we never discuss education at the CVCP. We discuss everything else, student behaviour, ad museum, but when it comes to policies concerning adult education or policies concerning teacher education there is hardly a murmur."

"I do not think that the CVCP has been very effective. It must take on more than six months to obtain certain areas of debate where it can speak authoritatively. The press always talks about the prestigious CVCP but I do not believe they are listened to in political circles."

But whether listened to or not, Professor Richards made it clear that the CVCP and the University Grants Committee are the only avenues through which a vice-chancellor can make his views known to government. In his eight years at Loughborough, he never met Sir Toby Weaver, the under-secretary overseeing higher education, and he has had no contact with Sir Toby's successor, Mr Edward Simpson.

"This is one of the weaknesses of the university system. I think it is a great shame that there are no means of getting to the DES except through the UGC—because the DES has no power in the universities to shrug off its responsibilities for them rather easily."

He went on: "I for one would have been much more willing to respond to the DES's feelings and suggestions than I was ever allowed to by virtue of the fact that I had no contact with it."

Professor Richards pointed out that some vice-chancellors have personal contact with government, but for most the chairman of the CVCP is the chief interface. "The chairman is the man who really has the contact and he is very wary of it—because it is so formal and imperious, he borders on confrontation rather than any regular working arrangement."

He believes that relationships between universities and the DES



Professor Ellyn Richards.

should be closer ("short of the DES feeling that it has power to command educational aims") and would support a system of regional councils for higher education, pointing out that it already has to be done in medicine, management and teacher education.

What advice would Professor Richards give to a prospective new vice-chancellor? "Let him get in touch with all the other vice-chancellors to produce absolute facts and figures and march on the secretary of state for education to let him know how well we are doing, but how financially vulnerable we have become."

He went on: "Even though things are more promising than six months ago, I am still depressed about the possibility of redundancies."

Asked if this was a common belief amongst vice-chancellors, Professor Richards said: "Individually most vice-chancellors have had in mind the need for a redundancy scheme if there is going to be a policy of still further financial retrenchment. As staff costs are our main financial burden we cannot go on saving more money without cutting staff."

It is clearly a thought which depresses Professor Richards enormously; would he recommend the job of vice-chancellor to anybody? "There is a need for vice-chancellors; it is a crucial job, rather lonely, but some people adore it. I have thoroughly enjoyed being vice-chancellor of Loughborough, but not being a vice-chancellor as such."

The Scottish office will have assessors on the panel, for purposes of liaison rather than actually deciding on research applications. But there are doubts about whether this gives sufficient contact with government.

The report spoke about longer term research being the responsibility of the SSRC. "Policy" research could be commissioned by the central or local government agencies involved.

"It is not the function of the SSRC to provide basic sociological information for administrative decision-making purposes when the responsibility of central or local government agencies, who can carry it out either internally or with the help of academic researchers commissioned by them."

Joint programmes of research between government and the SSRC were ruled out. "When we came to explore the possibilities in more detail with the assessors and with the Scottish academics we decided the SSRC could perform a more useful task by sponsoring research projects which would be unlikely to attract funds from up-research council sources."

"At the same time we would not wish to rule out the possibility of joint funding, might be thought appropriate by both sides for at least some projects at a later stage."

Despite its mixed reception from Scottish academics, the panel under Professor Martin promises to pursue its task energetically. Its main work will be:

- the dissemination of unpublished findings;
- the joint planning of comparative local studies;
- cooperation between Scottish-based researchers and researchers in other countries (particularly Norway), where offshore oil is being developed;
- collaboration between researchers from within different Scottish university departments and disciplines.

Another political difficulty for the panel could be the differentiation between academic research and that commissioned by or carried out by

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David Walker

## If we can't convince you that your company could use a Sony Video Rover, perhaps this river can.



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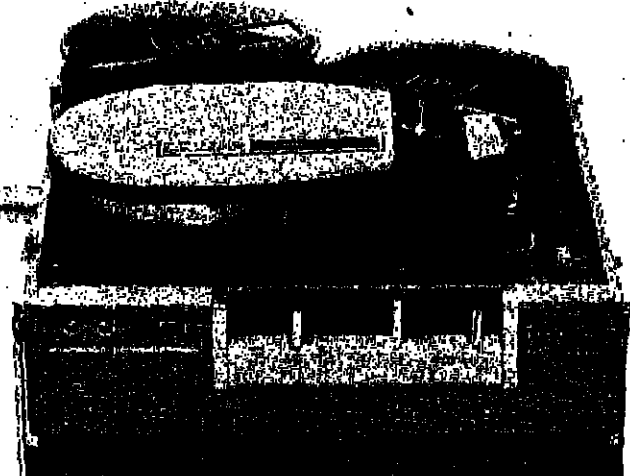
It got all the punishment Zaire could dish out. Muddy jungles. Hot, humid climate. Hazardous rapids.

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## SSRC oil project stirs up highland fling

The Social Science Research Council is to make a £150,000 investment to monitor the social impact of Scotland's North Sea oil developments such as the building of exploration platforms.

It has set up a committee under Professor Fred Martin of the department of social administration at Glasgow University to continue and strengthen the SSRC's involvement with monitoring the social consequences of exploring the North Sea, producing oil and eventually coping with the day the wells dry up or prices drop.

The SSRC's investment, though small in relation to the huge income from oil revenues, is a sizeable chunk of its own budget and will be paid out in two stages. Until September, 1977, £20,000 has been allocated, with a further £130,000 until October, 1979, "if necessary".

What the SSRC is not doing is taking a complete overview of social scientific work in Scotland. This is made clear in the report of an advisory group under Mr Gary Runciman, a council member, which was published last week.

Mr Runciman's advisory group said that though the suggestion that the SSRC ought to encompass the promotion of social scientific research into Scotland as a whole was attractive and might be reconsidered in future, quite ruled this out. Likewise they could not accept the case for a research unit or institute on a semi-permanent basis to bring together the ablest researchers studying Scottish society, who are at present isolated in different departments.

The report attempts an exhaustive summary of work being done in Scotland and makes some recommendations for SSRC policy. It concludes that research is at best

patchy, and much is of a general nature, throwing little light on the questions of politics, planning, economic structure, fiscal policy, community and environment raised by the discovery of oil off the coast.

Furthermore, virtually no genuine multi-disciplinary research, in the sense of investigators from different disciplines examining related aspects of the same problems, is in progress, although many academics have expressed their view that the questions raised by the oil discoveries are particularly amenable to this kind of approach. It says.

The panel to be set up in the next few weeks to include between four and six Scottish social scientists would follow up contacts to promote the free flow of ideas between people working in parallel areas. It would commission exploratory studies, and organise seminars and conferences.

More importantly, the panel should be able to commission research on a reasonably large scale. Money, of course, is the problem. An Aberdeen-based newspaper said that £150,000 would not sustain many projects over any length of time.

The report said: "The amount required in practice will of course vary within very wide limits, according to the topics chosen, the methods employed and the availability of suitably qualified researchers. If, for example, a single anthropologist is commissioned to study a selected small community, part-observation and cost per annum will be relatively small."

"If, on the other hand, a project is mounted involving survey research on a representative sample of the Scottish population, this would call for a very large sum in a single year."



Rig site preparation at Nigg Bay, and an example of the product.

But money is a comparatively straightforward difficulty. Reputation, academic pride and differing judgments about the value of social life are all liable to be involved in the kind of more direct involvement of the SSRC in research on Scottish politics and in flux, too, with the possibility of a Scottish Assembly being set up within a year or so.

An infectious remark in the report about the need for research by political scientists and social psychologists to look at nationalistic elicited the response of the Scottish Office that its assessors, on Mr Runciman's advisory panel had no part in writing the report.

Academic politics will have to be played by the panel if they are to make judgments about research applications and actually commission research. Many Aberdeen social scientists, for example, consider that work that has gone on at Aberdeen for several years has been neglected by the SSRC, which now comes in

rather late in the day masquerading as innovator.

This view has been put strongly by members of the sociology department at Aberdeen, including Professor M. P. Carter, the department head, and Dr Robert Moore, a sociology lecturer, who have gone so far as to call the publication of the report possibly a public relations exercise by the SSRC. Elsewhere in Scotland there is a feeling that the involvement of Professor Carter, MacKay and Sedgwick at Aberdeen have got many aspects of research into impact "seen up" and that the SSRC ought to recognize this.

At the same time there is a fair of over-concentration of research in other Aberdeen social scientists said that centring research in one place could stimulate dangerous rivalry, the important thing for them was who was working, and how good the research was.

Another political difficulty for the panel could be the differentiation between academic research and that commissioned by or carried out by



## Confidence in future has gone

The Commons Select Committee on Science and Technology last week proposed a series of short-term measures to help research as an interim part of its investigation into university science. Selected extracts from its report are published below.

### The problem

The rate of inflation during 1974 was such that, according to the University Grants Committee's calculations, the universities experienced a reduction of £35.4m (or 2.6 per cent) in the purchasing power of their recurrent grant, and a severe reduction in grants for equipment and buildings.

The evidence suggests that both the Department of Education and Science and the UGC tend to assume that university costs should be assessed primarily in terms of the teaching function. This leads to the perhaps unconscious assumption that the criteria applied to universities are exactly the same as those applied to other parts of the educational system. While a balance is inevitably drawn between different parts of the educational system, we do not believe that the differences between universities and other parts of the system are sufficiently recognized and considered that the wider national importance of research should constantly be kept in mind when assessing expenditure.

But the Government can be criticized, however, for the manner in which the universities' financial problems were handled, although even here it is only fair to say that the rate of inflation experienced in 1974 was unprecedented and that the universities bore also for the Government.

Until May, 1975, the individual universities had no idea of the level of their recurrent grant for the academic year beginning in September, 1975, and the processing of student applications had to continue in ignorance of the level of finance available to provide the teaching of those students. At the time of writing this report the universities have no indication of what their financial position is likely to be in 1976-7 or in the quinquennium beginning in 1977.

While we fully appreciate the difficult decisions facing the Secretary of State in implementing the expenditure cuts announced in the last Budget, we believe that the request of the UGC for a return to some element of certainty is a very fair one. We believe that it makes more sense to allow the universities to plan for a level of future activity than what is considered desirable in policy terms but to plan, nonetheless, than to delay the announcement of painful cuts.

In arguing for the restoration of a planning perspective we are not thereby committing ourselves to the quinquennial system as such, and in view of the effects of inflation on that system in the last year we believe there is merit in the Secretary of State's decision to re-examine the system in discussions with the UGC and the universities.

### Research

The general financial problems confronting the universities are generally admitted to have fallen rather more heavily on their scientific research activities than on their teaching activities. Using the rather rough-and-ready yardsticks which are perhaps inevitable under the present funding system, the UGC estimate that the reduction in the support for basic research out of the universities' general funds during the present year may be put at about £10m, apart from reductions in academic staff which now amount to a substantial sum.

In addition, the Science Budget, from which the Research Councils derive their funds, suffered a reduction of 2.1 per cent in real terms in 1974-75 after a period of declining growth, and will suffer a further decline of over 1 per cent in 1975-76.

Two factors have been adding to the difficulties of the science departments in the universities in recent years. One is the shortfall in the number of United Kingdom graduates willing to undertake postgraduate training in certain scientific disciplines in the universities. The nature of postgraduate training is such that postgraduate students make a vital contribution to the scientific research effort of the university. As their numbers fall, so the research effort of the departments concerned is further impeded, and since they are separately financed, their absence does not release funds (however meagre) for the recruitment of additional subject staff.

The second factor is the reduction in numbers of undergraduate students in university science departments. At present it is estimated that there are something like 18,000 vacant undergraduate places in the sciences and allied subjects in the universities. Apart from the unfortunate consequences of this international phenomenon for the educational system and for the country, the shortfall in both undergraduate and postgraduate numbers is likely to have a deleterious effect also on the research activities of the departments of physics, chemistry and engineering so affected, and is evidently causing serious worries.

### UGC

None of the evidence given to us by the UGC and the DES conflicts with the view that for all practical purposes student demand is the principal determinant both of the level of grants allocated by the DES to the UGC and of the allocation of funds to individual universities by the UGC, and that whatever the circumstances the universities are expected to give priority to their teaching activities at the expense, if necessary, of research.

All the evidence suggests that this is what is happening now, and this is what will continue to happen unless the rate of inflation is sharply reduced, or the funds available substantially increased.

We are not convinced that the UGC's attitude in these circumstances is consistent with the intentions of Parliament in voting money to them to distribute to the universities "as centres of advanced education and research". In our view these intentions are not being satisfied if, as the UGC itself admits, the impact of financial shortages is allowed to fall disproportionately and indiscriminately on the research activities of the universities.

We recognize that school-leavers cannot be directed to study chemistry, physics or engineering at university. It is, however, possible to direct adequate attention to the needs of the country for scientific and technical skills if the only response to the present shortage of students in these fields is to divert funds into subjects such as law or literature, simply because there is higher student demand for those subjects.

We do not suggest that the UGC should be required to impose on the universities a policy of uniformity in teaching and research. We do believe, however, that while financial shortages continue both the DES and the UGC should adopt a more flexible attitude towards student numbers, and that the UGC should make clear to the universities that as far as possible some priority should be given to the maintenance of the research base as well as to the throughput of students.

The present financial stringency is likely to continue for the foreseeable future and unless the UGC and the universities take positive steps to protect the research base to which they claim to attach importance will be weakened and the assumption implicit in the "dual system" will be undermined.

If this were to happen the freedom of the individual academic to undertake basic research without special funding would be undermined. The research councils would become dominant in the funding of university research, and policies of selection and concentration would become the order of the day.

While the universities are committed to the maintenance of the research base, and when funds are unavoidably limited it must be for the university community itself to decide modes of maintaining it. If the only way of achieving this is to reduce the throughput of students, or to further reduce the student growth targets, the UGC should be prepared to make this clear to the Secretary of State and to plead the special needs of the research base.

### Low morale

There is also extensive evidence of falling morale amongst non-tenured postgraduate research workers and technicians because of the uncertain status of their employment prospects and the absence of a career structure.

Subsidiary about the fairness of the methods of assessment of grant

applications by the Science Research Council also seem to be contributing to the sense of grievance apparent amongst some university scientists. Although there is considerable praise for the SRC, which in the evidence of the sub-committee, some scientists believe that the council and its committees and boards are both inefficient in their handling of grant applications and biased in their assessment of such applications.

The council has concentrated the minds of the university community on this problem, then it may be seen in the future to have been of some benefit. It would be highly regrettable if the universities were to ignore the opportunity now offered to them to review their priorities and to seek the most efficient means of deploying their more limited funds.

We sympathize with the opposition expressed by the chairman of the UGC to the suggestion that an external review should be undertaken of the relevance of the present research activities in the universities. We are not at present suggesting such a review. But unless there is to be a general decline in the standard of university research, the universities must accept the need to undertake such a review themselves.

### Postgraduates

We believe that a system of differential grants for science postgraduates would provide the universities with a practical and valuable tool to assist in the encouragement of research in priority areas. We urge the Government to give urgent and immediate consideration to the merits of such a system. Although the details need to be considered, we suggest that in principle it should provide for an additional sum of money to be made available through the science budget for "topping-up" grants to postgraduate students in those areas of research which the research councils have selected for priority treatment.

For such a scheme to have the desired effect, the good graduates whom we would expect to see coming forward for training in priority areas would need some kind of assurance that potential employers would accord similar priority to their new skills. It will therefore be an essential condition of the scheme that the SRC should only provide "topping-up grants" after full consultation with the industries concerned, and that these industries should offer equally attractive opportunities to the scientists and engineers who benefit from the scheme.

In 1973 the expenditure committee considered this question during their inquiry into postgraduate education. They said: "We consider that the first step in relieving the situation should be to raise the fees for overseas students from £250 to whatever sum will cover the full costs of the education and training they receive."

The second step should be to offer scholarships to suitable qualified graduates from developing countries within the Commonwealth and, where appropriate, outside; these scholarships would be charged to overseas aid.

The third step should be to negotiate reciprocal arrangements with other countries or groups of countries within the Commonwealth, whereby students, particularly those who are particularly bright, should be a Commonwealth exchange scheme. In this way, we hope, British universities and polytechnics would be able to provide generous postgraduate facilities to overseas students but the cost would be there for all to see.

We understand that no reply has been received from the DES on this subject. This surprises us. We welcome the Secretary of State's announcement that a "longer term study" of the problem is being made by his department and we further ourselves.

We believe, however, that there is a good prima facie case to be made for the expenditure committee's recommendations. We do not believe that overseas educational aid should be provided in the present arbitrary and unacceptable manner, and consider that the present situation raises serious questions about the manpower training functions of the universities' science departments.

## Is there somewhere man so bold as to start Academic Monographs Ltd?

Recent complaints in these columns and elsewhere about the decline of academic publishing signals a situation which is as distressing for publishers as it clearly is for the academic community.

In the wider context, it is not perhaps of any greater consequence than the more muted wailing of the million unemployed. But academia is as susceptible as the rest of us to the psychology of rising expectations; once you have tasted the fruits of publication, you are reluctant to return to office duplicators.

If, in the contraction of monograph production by commercial publishers, the academic establishment is really losing a service which is subject oriented and thus the remedy should be in its own hands — by starting its own non-profit making publishing company: Academic Monographs Ltd.

The aims of the company would be two-fold: to publish academic treatises of a high standard, and, notwithstanding that, to be unlikely to be accepted by other publishers, and to publish these at the very lowest possible cost and minimum price.

The company could be a grouping of largely autonomous sections based on subject areas; this structure brings benefits of compactness and concentration to the specialist publishing effort.

Each section of the company would be controlled by an academic board constituted by subject—rather than by the Council for National Academic Awards. These would be responsible for selecting scripts for publication, but they would also monitor the financial results. In this way they would be directly involved in the commercial aspect of the enterprise and thus constrained by its discipline.

Every book should be produced as simply and cheaply as possible. Authors could be required to present their scripts as "camera-ready copy"—that is typed pages which may be photographed and printed direct.

This process saves a deal of money, since the type-composition stage of production, together with proof correction, is dispensed with entirely.

The printed sheets could be sewn and bound in "semi-stiff" covers. This gives a resulting book which is not as sturdy as a cased book, but nor is it as flimsy as a paperback.

However, it is closer to a paperback and should be perfectly satisfactory for both library and individual use in the case of highly specialized books like monographs.

Turning now to some detailed costs, we will use the mythical, but useful, concept of the "average" book. Let us suppose that the average monograph is a work of 120 pages, which will achieve a worldwide sale—provided the price is not prohibitive—of 600 copies.

For an average sale of 600 we would expect the most successful titles to sell about 1,000 copies and the least successful some 300—surely the very minimum sale which would make anything worth publishing. Currently it is possible to produce 1,200 copies of such a work, by the process outlined above, for a total production cost of rather under £600.

TABLE 1

Sale of 200 copies each of 36 titles at £3 per title	£ 7,200
Production cost of 12 new titles at £600 each	7,200
Fees in lieu of royalties	1,200
Publicity	600
Overheads	10,000
Not profit for the year	19,000

TABLE 2

	End of Year 1	End of Year 2	End of Year 3
Net profit position	(11,800)	(4,500)	2,100

We may assume that authors, having failed to place their work with other publishers, will accept unfavourable royalty terms in the cause of learning and in order to get their work published—perhaps a fee of £100 in lieu of royalties, with the possibility of a royalty being paid on a reprint if a book sold particularly well.

Publicity costs are difficult to estimate, but £50 per title may be fair, remembering that each section could handle 12 titles per year, including some direct mail selling. £10,000 should cover one year's operations. We assume that premises are to be provided rent-free, and that loan capital will be available interest-free.

On the receipts side, let us suppose that our average monograph would bring in £3 net per copy to the publisher. This might represent a retail price of £4.50 less a trade discount and a dispatch charge; or a price of £4 less postage, packing, invoicing, and so on, if sold direct.

The mechanics of the sale need not concern us. Although £4 to £4.50 might be thought expensive for a book produced by the "printed typescript" method, by today's standards it is surely very reasonable given the specialist market—and greatly preferred to the £2 to £10 now being charged for many monographs.

We will assume that the average life of a monograph is three years, and also make the simplifying assumption that 200 copies are sold in each year. If 12 titles are produced each year, the enterprise would reach a steady-state position after three years.

From the foregoing, we can now deduce the annual financial position of a section of the company for each year from year three onwards, given a constant rate of publication and constant prices (table 1).

Using the same analysis, we can now look at the first two years also. If 200 copies each are sold of the first 12 titles in year one, receipts will be £7,200 but expenditure will be £19,000; in year two, 24 titles will be on sale, and receipts will be £14,400 with expenditure again at £19,000.

The total picture is thus, table 2. The company would make losses in years one and two, but from year three onwards each section could make a small profit.

The loan capital required to launch one section would be in the region of £16,400; this could be repaid out of profits, beginning in year three and repaying completely in year nine (but earlier, of course, given a positive rate of inflation). It claims that these figures are perfectly realistic and that such a publishing company could trade successfully, to the overall benefit of those engaged in research, academic entrepreneurs, where are you?

Philip Allan

The author is a founder and director of Philip Allan Publishers Limited.

## A boom period for learning about religion

Hywel Lewis discusses the recent growth in interest in university religious studies courses

One of the most remarkable features of higher education today is the extraordinary interest taken in the study of religions. There are various reasons for this, not all of them estimable. But there certainly seems to be substance in the answer given by many young applicants for places at our colleges, namely that they want to learn more about religion and its claims.

This is one of the most encouraging signs of times that have otherwise much to depress us. It is a paradox, but one whose significance we may well ponder, that the more secular we become the greater is the interest in religion.

The boom in religious studies, while indeed welcome, presents various problems. Among them is the problem of presenting, fairly and without bias, a religion which is not one's own, and of doing this, especially in schools at a level where some simplification is unavoidable.

A common tendency, particularly for intellectuals, is to go to extremes in seeking some empathy with faiths other than one's own and for which we may not have the highest regard. We must not forget the complaint made against a famous philosopher that he was so liberal that he would not take the side of truth against error.

Openness to other religions, and a concern to present their merits, is not incompatible with a profound sense of the distinctiveness of one's own. Practical wisdom must dictate how this should be balanced with the respect due to faiths we cannot accept ourselves, but nothing is gained by pretending that they all come to the same thing, and deserve the same regard.

Western religions, and especially Christianity, have had to go through the hush of severely sceptical analysis. While the days of the crusades and of this are certainly over, and metaphysics has

been restored to an honourable place in our curricula—at least in the cautious form—the gain in the shedding of pretentious obscurantisms and confused dogmatism has been enormous.

It is unfortunate that the claims of higher faith have not had to pass through the same fires. Our critics, familiar mostly with Christianity, have modestly abstained from commenting on matters about which they are largely ignorant.

But one wonders how the great religions of the East would fare at the hands of those who have brought their analytical subtlety to bear on the Christian faith, and how much would survive. In the ultimate reckoning, the gain would be substantial.

A further problem is the relation of tradition to the study of religion. Religious studies in general, Christian theology in particular, is a sufficiently comprehensive and rounded discipline to remain an important academic subject on its own. It certainly has its place in the history of Western culture.

To expand or attenuate this to include within it, on an extensive scale, the various other studies which deserve a place today would be a mistake. Theology can certainly benefit from the impact of new advances in psychology or anthropology, and familiarity with non-Christian faiths.

But there will remain a prominent place in higher education, not only respecting ordinands but also lay students, for the study of religion as a discipline centred upon biblical and doctrinal studies in which other concerns, while not unimportant, have an ancillary and subordinate function.

It will be an ill day when Christian theology, in substance in the form it has traditionally had, ceases to have an important place of its own in higher education.

On the other hand, other studies have come to stay. Courses like the BA in religious studies in London University, where non-Christian religions may have the central place and where the new disciplines of psychology and social studies will have greater prominence — are bound to be in great demand, and very properly.

There should be a reasonable rap-

prochement between these and the study of Christian theology, but the merging of the two in an amalgam in which Christian studies surrendered their distinctiveness and the coordination of various ingredients within them, would not be to the advantage of either theology or of other religious studies.

Another serious problem arising from the present boom in religious studies is that of providing a body of suitably qualified teachers, and teachers of teachers. At the moment this is less acute because of the moratorium on the creation of new posts, due to the financial crisis.

We must assume, however, that this crisis will be solved in some way, and that new and rapidly developing subjects will not be held back indefinitely; in many respects besides the present one, a permanent state of frustration would be tragic.

Culture without novelty and enterprise stultifies itself. But if many new posts, some of them at the highest level, are to be created and filled in the colleges of education, the polytechnics, and the universities, how can we avoid expecting to them persons of mediocre quality who will then dominate the subject for a long time to come?

This is a very acute problem at present in religious studies. The subject is greatly in demand, and there is no dearth of eager candidates to enter it. But, as yet, it is not enough. The first concern is higher education especially, should be to ensure that the highest standards are maintained, at least equal to those of other subjects, and the studies appropriate to academic study and to responsible citizenship.

The universities, above all, must set the standard, even at the expense of delaying appointments where candidates of the highest quality are not available.

In a few years there will undoubtedly be a reservoir of highly trained graduates, now in their first year of university, who will have sorted themselves out and shown which have the many-sided qualities and stamina required by this difficult, though seemingly easy, subject.

Patience and caution, including more appointments at junior rather than senior levels, seem to be the



appropriate policies, even under the obvious pressures of an expanding subject, and even with the risk involved in the vicious temptation to make the circumstances in question an excuse for resisting the development of the subject.

Deep in these sorts of consideration are the perils of narrow specialisms, and the subject has certainly suffered much from this in the past—and the wrong sort of sophistication.

Linguistic competence is obviously one essential requirement of scholarship and teaching at the highest levels. But, as yet, it is not enough. The linguistic expert in all the areas of religion.

We must reconcile ourselves to relying on one another and on the best secondary sources outside the area of our own speciality. There can be no rule here, other than the rule of thumb.

On the one hand we must not be bullied or frightened by the language expert, often subject to prejudices and limitations of his own, and, on the other, we have to ensure so far as we can that the teachers of teachers have the linguistic and technical competence which is indispensable to maintain the study of the subject at the highest level.

These and related problems are too vast to be examined closely in the space of a short article. One can only hope that a fruitful dialogue will continue.

Perhaps it is not too obvious a professional bias for me to close by echoing the words of Professor Warshawsky, of the Hebrew University of Jerusalem, whom he stressed, in *Religious Studies*, June, 1974, the centrality of philosophy for all forms of religious study.

Somewhat later, the basic philosophical questions, the nature of knowledge and belief, the concept of the person, freedom and responsibility, moral truth and transcendence, are bound to intrude to their solves.

While we may not always find the prevailing fashion in philosophy to our taste, or as illuminating as we expect, we cannot dispense with the peculiar reflection which the philosopher has to undertake, and his special way of looking at language for its own sake, but at least we ourselves and the world around us are really like.

The author is professor of the history and philosophy of religion at King's College, London and editor of *Religious Studies*.

## Portugal puts its students out to work

Ben Pimlott describes a scheme for making students do a year's community service before entering university

All school-leavers in Portugal intending to enter university will, from this autumn, be obliged to carry out a year's work in a wide range of community projects throughout the country, under the Government's new Students Civic Service scheme.

The scheme has been launched by Portugal's Ministry of Education and Culture, and is one of several new projects that have followed the replacement of key officials in various government ministries as a result of the recent political upheavals.

The idea of civic service was originally put forward as a means of occupying thousands of young people who had been refused entry to university last autumn because of a quarrel between the faculties—which would not allow selection for university entrance—and the Ministry, which in the end decided to have a first year students in 1974-75.

However, with the progressive move to the left of the regime in the first half of 1975, the idea grew, and the intention now is to make the service an integral part of Portuguese higher education.

The aim is to help create in students a sense of social obligation and a realization of their privileges by bringing them into contact at an early stage with Portugal's very poor and backward working population.

The hope is that the students (still overwhelmingly drawn from Portugal's very small middle and upper middle classes) will find out about the country's social problems while placing their talents and skills at the disposal of the community.

For years Portuguese university

courses have been remote and distant from the real world," says Dr Durastio Barbosa, the young and enthusiastic coordinator of the service, whose qualifications include a Czech degree in educational planning and who was alongside two lieutenant-colonels.

"We want to help universities change themselves, in order to fit in with the country's needs. Above all our job is to change the mentality of the students," he says.

The scheme was slowly being rolled off the shelves, first announced just after Christmas last year, it was sharply attacked both on the right and by ultra-left students, suspicious of the political influences they saw behind it. It needed the March 11, unsuccessful counter-coup, and consequent boost for sympathizers in the Government, to make the scheme operational.

The final decision to go ahead came at the end of May. Before then, however, a skeleton staff had been seeking out projects and registering students for the scheme. In Portugal's confused political situation, it was possible to proceed on the basis of a network of institutional sympathies, even without full approval of the Government. Other government departments lent money, while trade unions and local authorities backed pilot schemes with facilities and accommodation.

Once the decision had been taken, the new Civic Service Commission began to move. By the end of July between 10,000 and 11,000 students had been sent out to work by the commission's central planning office in Lisbon.

The first batch of students are volunteers (though they gain credits for taking part) and work only under the terms of their own college. From this autumn, however, participation will be compulsory, and a condition for university entrance will be a year's work under the direction of the commission.

Students are organized into teams and placed under the supervision of representatives of the particular

ministry in whose province the type of work undertaken falls.

In addition to the tasks assigned by the service, students will be expected to do a foundation course of study in preparation for university. And at the end of the year, they will be required to give a full report of their activities.

A high proportion of the students are being given jobs which are broadly didactic. Nearly 800 are at present employed teaching illiterates, over 2,000 are setting up and running children's sports centres, while 800 are involved in basic health and hygiene education.

Others are running nurseries and kindergartens, especially in the shanty-towns on the outskirts of Lisbon and Oporto. Students have also been given jobs organizing libraries, working in hospitals and health centres and gathering data for social surveys.

Some students are helping to run a national anti-cholera campaign. One hundred and fifty students are currently engaged in making a collection of popular culture—recording songs, stories and proverbs, and collecting musical instruments in order to set up a museum of popular art.

A big problem has been how to avoid competition with workers in an already overcrowded labour market. The employment is now close to 10 per cent and trade unions are understandably sensitive about students providing a pool of labour for agencies happy to get work done on the cheap.

A result has been that in some markets the integration of work (especially manual jobs) have been barred. However, the commission tries to work very closely with the union federation and other government departments.

Though the commission is the creation of the Education Ministry and comes under the authority of the Minister, it has been able to rely on support from the Armed Forces Movement (MFA), which sees close links with its own "cultural dynamization" programme.

The MFA has "lent" the commission 18 officers who help to run each of 18 regional centres, and there is also a coordinating council on which six officers sit. This military backing and involvement is vital, as the commission operates with a very small civilian staff and within a budget of only 300,000 contos (£5.4m).

Whether the students will find army surveillance and paternalism entirely welcome is, however, another matter. Indeed, for the students, conditions may well seem remarkably similar to those they have met as recruits in national servicemen in the army.

They are certainly not feather-bedded. The commission pays transport costs to the job, and local centres help to find accommodation. All the students get in wages is 70 escudos (about £1.25) per day, to eat and sleep.

But, having grown up with the expectation of four or more years' fighting in a distant and unpleasant war, the students should find one year in the Civic Service a vastly preferable alternative.

This summer the commission is feeling its way, seeking to create a framework and to learn by its mistakes. Drawing heavily on the experience of other countries (not least Algeria, where Dr Barbosa spent four years of political exile) those running the scheme are acutely aware of the difficulties.

They are only too conscious, for example, that Portugal's chaotic economy provides none of the short-cuts available in the closely planned communist systems where similar schemes have been tried. Whether the scheme succeeds will depend on the students—in many universities ultra-left student organizations have already condemned it—partly on the continuing cooperation of local and national agencies and perhaps most of all on the outcome of the unresolved struggle for power in Lisbon.

The author is lecturer in politics at Newcastle University.



Portuguese students demonstrate in Oporto. Recent Government moves are aimed at harnessing their energy to community projects.



## American news

## Aptitude scores tumble to record low

from Thomas Cahill

NEW YORK This year's average college freshman is significantly less able than the average college entrant of a year ago, according to data just released by the College Entrance Examination Board. In fact, his scholastic abilities are the lowest since the board began making its records available in 1957.

Each year the board administers the Scholastic Aptitude Tests, standardized measures of verbal and mathematical skills, which are taken throughout the country by pupils who hope to go on to college. Their scores are then used by most colleges as an important indicator in deciding whether or not to admit them.

The tests are scored on a scale of 200 to 800. This year the average verbal score was 434, a decline of 10 points from 1996. The average mathematical score was 472, a decline of eight points.

These are the sharpest declines in 12 years. From 1957 to 1962 the average scores remained relatively stable at about 474 for verbal and 497 for mathematical. In 1963 the average scores peaked—478 for verbal, 502 for mathematical. Since then the averages have fallen steadily by about three points a year for the verbal score and two points a year for the mathematical score.

This astonishing trend has elicited much conjecture and alarm. Television is a prime target for blame, the theory being that thousands of hours of television have gradually dulled the minds of students.

Another theory is that the fall has been caused by a decline in effective teaching, especially in the basic subjects of reading, writing and arithmetic. But if this were the case, one would expect maths scores to drop more dramatically than verbal scores.

The board, concerned that hidden

factors in its own testing programme could be responsible, has been conducting research since 1972 into possible causes. At first it was thought that the tests might have become gradually more difficult, but parts of old tests were given to this year's seniors and they did not perform as well as the original takers.

Another theory is that there has been a change in the composition of the college-going population, that more students from lower income families are finding their way to college. But this could not fully account for the distribution of the decline, which is not spread evenly but is more acute at either end of the scale. There are more low scores and fewer higher ones.

Though an increase in lower income students might possibly account for the 8 per cent increase in verbal scores below 400 and the 13 per cent increase in mathematics scores below 400, it would not account for the 20 per cent drop in verbal scores above 600 or the 8 per cent drop in mathematics scores above 600.

The scores of girls fell more than the scores of boys—11 as against 10 points on the verbal, 10 as against six points on the mathematical test. This has been the consistent pattern since 1968 on the verbal test, though until now girls have had a slight edge on the mathematical test.

Another unexplained phenomenon concerns "repeaters"—students who take the test for practice in their junior year and then for college placement in their senior year. Such students used to gain about 35 points the second time. This year they were able to increase their score only by about 15 points the second time. This, too, has been part of a consistent decline.

College-bound Seniors, 1994-1995.  
College Entrance Examination Board.

## Study will examine problem of proliferating journals

from Andrew Ortony

ILLINOIS

American academia has long been regarded as the original home of the publish-or-perish syndrome, and the information explosion has been fuelled by the rapid increase in the number of scholarly books, journals and reports. At least partly a result. In the spring of 1978 one more report will be added to the pile, concerned with "all significant aspects of the total system of communicating scholarly knowledge through print". It will contain the results of the National Inquiry into the Production and Dissemination of Scholarly Knowledge, sponsored by the American Council of Learned Societies.

The National Endowment for the Humanities will provide half of the \$500,000 to finance the project, the rest coming in equal portions from the Ford, Mellon and Rockefeller foundations. The study will be conducted by a team headed by Edward Boucher of McGraw-Hill and will include representatives of university presses and commercial publishers

as well as libraries, journal editors and foundations.

The study will examine a number of problems raised at the recent annual meeting of the Association of American University Presses in Nashville, Indiana. One of these is, of course, rising costs, both of production and distribution. Increased costs for the publishers come at a time of nationwide reductions in funds flowing into the universities, whose libraries are increasingly tending to cut back on new books in preference to journals.

Other issues to be looked at will include pressures on young scholars to publish even trivial or duplicative material, and to create new journals to find outlets for their work; the confusion which exists on copyright and how producers of literary property—authors and publishers—to be compensated; the disinclination of commercial publishers to risk publishing important books because of shrinking markets; and the rapidly growing costs of the library service resulting from the deluge of published information.

## Stanford launches campaign to woo female engineers

Stanford University School of Engineering has produced a glossy booklet aimed at attracting more women to the discipline. It says that, unlike other courses, engineering can just about guarantee a job at the end.

The world's female engineering student is assured that "an engineer is someone who makes things better."

A Stanford news item on the booklet says that starting salaries for Stanford engineering graduates "average \$1,200 to \$1,250 a month."

The booklet says that less than 1 per cent of engineers in the United States are women—the figure is 7,000 women engineers out of a total of 700,000.

## PhD surplus forecast for next decade

from Frances Hill

NEW YORK

Amid the present unemployment problems facing PhDs the Bureau of Labour Statistics has just published *PhD Manpower: Employment Demand and Supply 1973-1985*. Moderately encouraging is the pamphlet's assertion that from 1972-85 demand for PhDs will grow nearly twice as fast as for all workers, but more slowly than for college graduates as a whole.

Total openings over this period for growth are estimated at 140,000 and replacement at 47,000. If, however, the trends in awarding PhD degrees continue the supply of new doctorates will number 580,000.

The projected supply in life science or social science and psychology will be twice as high as requirements; in arts and humanities three times as high and in education four and half times as high. In physics supply will be half again more than requirements and in mathematics about one eighth more. These statistics, based on projections from 1972, may be high, especially since graduate enrolment has dropped more than expected.

Several assumptions underlie the Bureau's projections: the institutional framework of the American economy will not change sharply; social, technological and scientific trends will continue and efforts to solve such major domestic problems as energy shortages, air and water pollution, and urban congestion will consume more productive resources (the recession has certainly slowed attempts at solution).

The most significant assumption, however, is a 4 per cent unemployment rate and a 3 per cent annual increase in the implicit price deflator for gross national product. Unfortunately for higher unemployment percentages and inflation increase are growing more tolerable to many. Consequently the outlook presented in the report may be slightly more optimistic than is presently justified.

The analysis goes on to conclude that underemployment, with its inherent job dissatisfaction, may be as serious a problem for PhDs as unemployment. It continues the possibility that with one-half of all PhDs teaching in classrooms, more emphasis may be given to developing teaching skills. Moreover, the monograph suggests that employers may restructure jobs to make use of PhDs and narrow the salary differential between PhDs and other college graduates to make it more attractive to hire increased numbers of PhDs.

## Yale summer 'did not lose'

Yale University's first summer term attracted 562 students, who paid \$1,355 each for full tuition.

The effect of the 10-week summer session on Yale's financial position is difficult to calculate, since the term is regarded as an integral part of the regular academic programme. None the less, Mrs Elizabeth Eisenstein, assistant director of the Summer Term Planning Office, says that "we certainly did not lose money."

Her estimate is based on an accounting procedure which excludes the cost of paying for the salaries of the 65 faculty members employed over the summer, even though these faculty members will be entitled to an additional term's leave during the regular academic year.

The university hopes to attract about 600 students to its summer term during the coming year, of the three-year pilot programme.

## Dayan opens campus lecture tour

Mr Moshe Dayan, the former Israeli Minister of Defence, is now making a 25-campus lecture tour of United States colleges and universities. It is reported that he is being paid \$3,500 a night plus expenses which may be as high as \$1,000 a night. His main message is an appeal for American policy towards Israel, for its lack of total commitment.

## City University urged to end free tuition commitment

from our correspondent

NEW YORK

Mr Ewald Nyquist, New York State Education Commissioner, has asked the City University of New York to end its long-standing tradition of tuition-free undergraduate education.

For more than a century City College and, more recently, the many additional colleges that now make up the City University system, have given to young New Yorkers of slight means an education that sometimes rivalled in quality the offerings of the Ivy League. Till recently only a nominal yearly fee has been charged to undergraduates, who now number 127,000.

Last December Mr Abraham Beame, Mayor of New York, called for an "austerity budget" of \$663m for the City University to fight the city's approaching fiscal crisis. More than half of the costs of operating the City University are met by New York City taxes; the remainder comes from state and other sources.

Since then the mayor has twice reduced the university budget—by \$597m and now to \$535m, or 20 per cent below the amount he earlier considered essential to cover cost increases and meet planned enrolment levels.

In a letter to the New York City Board of Higher Education, which has power to introduce tuition charges, Mr Nyquist insists that the university must either cut back on its services or charge tuition fees. He rules out either a reduction in academic quality (principally a reference to faculty salaries) or the controversial "open admissions" policy, instituted by the board in 1969, by which the doors of the university were opened to all New York City high school graduates, however poor their academic records.

He recommends that tuition charges should be the same as those made by the State University of New York—\$650 a year for freshmen and sophomores and \$800 for juniors and seniors.

Mayor Beame, himself a graduate of the City system and in the past a strong advocate of free education, has ceased to protest against tuition charges. Reaction from City University students and from the board has predictably been negative. One comment was that, given the large percentage of minority group students now attending the university, "the outcry for the elimination of free tuition has some suggestion of racism."



Vietnam veterans: cashing in on college.

## Veterans who only 'drop in' for cheques

from Alison Wolf

WASHINGTON Although there is no unified aid programme for college students, the federal government pays out millions of dollars yearly in education benefits for armed forces veterans. The GI Bill was first passed for the benefit of demobilised Second World War servicemen—and the latest in a series of scandals associated with its administration is now being uncovered. Veterans throughout the country are, it is being discovered, collecting cheques to pay for classes they never attend.

The current recession has meant record college enrolments among veterans. Veterans' administration officials report that 1,600,000 were in college last spring. In addition to those attending vocational schools or finishing high school, benefits paid out for course fees, room and board and family maintenance totalled \$3 billion.

A large number of students, however, rarely went near a lecture.

## Women's colleges do better

Women's colleges, which only a few years ago were generally thought to be headed for extinction, have this year experienced an upturn in both applications and enrolments, according to the Women's College Coalition, a consortium of 71 institutions. Enrolments for 1995 were 3 per cent higher on average than last year.

Instead they enrolled, collected their cheques, then dropped out without completing their courses. Most colleges do not check the attendance records of students who "drop in" to collect their cheques. It is impossible for the end of the semester to catch up with a veteran who registered just to get federal assistance. "By then the money is spent," a college admissions officer said.

Such abuses are easier to get away with now than in the past, moreover, because the veterans' administration no longer requires a college to check out students before progress monthly. Instead it will authorize benefits for periods of up to four years without requiring any reports.

Abuses are nothing new while the GI Bill is concerned. After the Second World War many veterans took piano lessons or horse riding lessons or even took a course in a foreign language. Recently a favouritism of getting a college television has been to enrol for a mail order television repair course, with the television repaired as part of the kit. This latest scandal, however, may turn out to be the biggest and most expensive of all, affecting most of the country's colleges.

## West Germany

## Court rulings sink selection policy

by Günther Kloss

It has now become clear that the elaborate university admission procedure, as at present implemented by the Central Admissions Office (ZVS) in Dortmund (THES February 28 and March 14) will require drastic revision before next April. The ZVS, set up less than two years ago by an agreement between the 11 Länder, can only be altered by unanimous consent.

The death knell of the current system was sounded by the Bavarian Administrative Court last month. Its judgment was only one in a long series of court actions brought by unsuccessful applicants (THES July 18) but on this occasion the court's ruling that one provision of the agreement violates the Bavarian constitution invalidates a central point for the entire selection process.

The clause in question has always been one of the more controversial provisions of this all too bureaucratic yet hopelessly inadequate inter-state treaty. Both the treaty and several court decisions stress that the individual achievement of an applicant must be the main selection criterion. On present this is reckoned to be the average of all the subject marks which the applicant has obtained in the *Abitur*, his grammar school leaving certificate, which traditionally has been the pre-requisite for university entrance.

The problem arises because the same administrative procedure operates throughout the Federal Republic, yet each *Land*, and often each school in a *Land*, sets its own *Abitur* examination, and methods

and standards of marking are far from uniform.

The agreement seeks to overcome this by purely administrative and arithmetic means. The overall *Abitur* marks of all candidates for admission are added up to give a federal average. The average *Abitur* mark of all applicants from each *Land* is also worked out and compared to this federal average. If there is a discrepancy the overall *Abitur* mark of each candidate from a particular *Land* is then adjusted upwards or downwards by the difference.

Under this equalization process all applicants coming from Bavaria will this autumn have systematically added 0.2 points to their *Abitur* mark, even before their entrance application can be considered. The reason is that the average *Abitur* mark of all Bavarian grammar school leavers was 2.6 (on a scale ranging from 1, very good, to 6, unsatisfactory), 0.2 points better than the federal average of 2.8. The reverse is true in North Rhine Westphalia where 0.2 points will be deducted.

Under the current procedure it is thus possible that in a popular subject like medicine, where only one in six of all applicants can be offered a place and the minimum overall *Abitur* mark securing such a place is a very high 1.8, a Bavarian school leaver with an overall *Abitur* mark of 1.7 will not get a place because the deduction of 0.2 will make it 1.9, but an applicant from North Rhine Westphalia with an *Abitur* mark of 1.9 will be successful, because his adjusted mark comes out as 1.7.

It is this bonus/malus provision which the Bavarian court pronounced unconstitutional. Initially introduced as a temporary expedient and only as such sanctioned by the federal Constitutional Court in 1974 it can now, five semesters after the agreement came into force, no longer be regarded as acceptable. The agreement demands that uniform criteria for the evaluation of the *Abitur* and equivalent certificates must be developed.

The court's analysis illuminates some of the deficiencies of the current practice. For example, increasing numbers of students are being admitted to universities outside the bonus/malus scheme, namely those transferring from advanced technical colleges: the value of *Abitur* marks as a predictor of later performance at university or in a career is doubtful; and there is an inherent contradiction between this schematic points system and the overriding principle of individual achievement.

One solution envisages a period of work related to a course of study interspersed between leaving school and beginning a university course. Another favours the introduction of an additional, subject specific aptitude test. The introduction of a nationwide *Abitur* on the French model is also advocated; and the allocation of places at random, drawing lots is also being very seriously considered.

In view of the urgency of the matter it seems quite possible that a special federal Bill will be drafted. This would, however, almost certainly mean the end of the ill-fated University Framework Bill.

## South Africa

## Student body fights against arrests

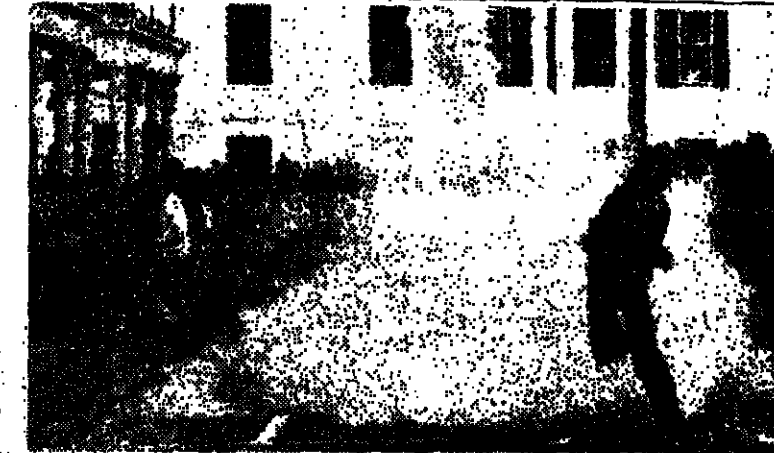
from Louis Hotz

JOHANNESBURG

The National Union of South African Students (Nusas), three of whose leaders, including its reiding president, Mr Karel Tip, are among those recently detained under the Terrorism Act, has set up a Law Commission at the University of the Witwatersrand.

It is the first body of its kind set up by Nusas and its object is to investigate all South African apartheid laws and security legislation dealing with alleged political offences. Members of the commission will be drawn from the staff and students of the university's law school.

Meanwhile, amid a flurry of protests and demonstrations at the university and elsewhere against the arrests, a concerted campaign has been launched calling on Mr James



Student riots in 1972 marked the opening of the government campaign against NUSAS.

Kruger, Minister of Justice, to bring the detainees to trial.

Speared by the Witwatersrand, the campaign is also aimed at securing the repeal of the Terrorism Act, and particularly those provisions which permit indefinite detention, usually incommunicado, and without recourse to the normal processes of the law.

Addressing a 6,000-strong meeting on the Witwatersrand campus, Prof.

## Canada

## Tuition charges stay pegged

from Israel Cinman

OTTAWA

Inflation will have little effect on most university tuition fees in the new academic year, the latest Statistics Canada figures show. But many universities are charging more for room and board.

Provincial governments have tried to pass on increased university operating costs to students in the form of higher tuition fees, but because they say that they want to maintain access to post-secondary education, they have been reluctant to do so.

A few universities, however, have increased their fees, albeit marginally. In Ontario, Brock University, for example, has raised tuition

fees by about \$5 for undergraduates, bringing the total to \$650, and by \$25 for graduates, making the cost \$675. Other universities which have increased their fees show rises of the same modest order.

While tuition fees remain relatively stable, students will have to pay more to live in university residences virtually everywhere.

For example, the cheapest annual room and board cost at McGill University will be almost \$1,700, an increase of more than \$500. Costs currently range from a low of \$925 charged by the University of Victoria to a maximum of \$2,310 levied by Mount Allison University in New Brunswick.

## New Zealand

## Maori protest over European

from Brian Priestley

CHRISTCHURCH

Maori leaders have protested against the appointment of a European New Zealander—who does not speak Maori—to a lectureship in Maori language and literature at the University of Otago, Dunedin.

The appointment, Dr R. A. Harlow, has been made in the hope of finding a suitably qualified Maori speaker of Maori.

The surprise of many New Zealanders, he is currently learning Maori at the University of Munich.

Dr R. O. H. Irvine, vice-chancellor, said after meeting the Maori leaders that the protests had been based on "misunderstandings". Consideration, he said, was being given to transferring the post in the hope of finding a suitably qualified Maori speaker of Maori.

## Sweden

## Big increase in college-going by women predicted

from Mike Duckenfield

STOCKHOLM

By the year 2000, Swedish women are expected to be better educated than men according to forecasts by the Central Bureau of Statistics.

At present only 26 per cent of women between 16 and 59 have attended secondary school against 31 per cent of men, with 7 per cent of both sexes having been to college or university.

By the turn of the century, however, 21 per cent of women will have had a higher education against only 17 per cent of men. Women are not expected to dominate universities, but they will more than make up for the vacancies in the majority of places in occupationally-oriented colleges including those for teachers, social workers and nurses.

This factor of Sweden's expected educational profile is one of the three main features in the bureau's report based on data from the last national census in 1970.

The forecasts also show the size of the problem facing the government of the recurrent education policy. In 1970, 57 per cent of men and 63 per cent of women aged between 16 and 59 had ceased full-time education after their basic schooling, which in the vast majority of cases amounted to only seven years.

Although the projections could not take into account this spring's Adult Education Act, which provided a wide range of subsidies for those wishing to extend their school learning, it is suggested that educational advancement for the over-16s will continue to be most marked among the relatively few educated.

It was forecast, for example, that for those who made up the 25 to 29 age group in the census, and who

will be between 55 and 59 in 2000, only about one in 32 of those with a basic nine years' schooling will progress to the secondary level, whereas an expected one in nine of those with secondary education will go on to mature entry to higher education.

Whether this disparity of second chances fulfils the bureau's expectations will depend heavily on the new balance of opportunities created by the 1968 reforms, which encourage mature entry to higher education, on the one hand, and by the adult reforms on the other.

Whatever are the successes of recurrent education in tackling the generation gap, overall standards are expected to be significantly higher by 2000 due to the schooling reforms of the 1960s which saw the introduction of a nine-year compulsory school (*grundskola*) and an integrated secondary school (*gymnasieskola*) offering two to four-year academic and vocational courses.

At the time of the census, about two-thirds of those aged between 35 and 44—what is called the "middle age" of Sweden's working population—had only received a maximum seven years' schooling, while fewer than one in 10 had entered higher education.

In 25 years' time, however, an estimated 58 per cent of this medium age group will have attended secondary school and an additional 26 per cent will also have been to college or university. Only about 16 per cent will have received the new minimum of nine years' tuition.

Finally, it is calculated that 84 per cent of all Swedes born during the last five years will stay on in full-time education after the leaving age of 16 and one in four of the total will take degree-level courses.

## Bolivia

## Brain drain remains major obstacle to development

from Patrick Knight

LA PAZ

One of the major problems for Bolivia is the continuing brain drain. There are some 13,000 students at La Paz University, but some 15,000 undergraduates are following courses in other countries, notably in Argentina and Brazil, in Western and Eastern Europe and the United States. Any Bolivian who wishes to continue to postgraduate level must go abroad and few return; 40 per cent of Bolivia's graduates emigrate as soon as they receive their degrees. There are many more Bolivian-trained doctors and engineers practising in other countries than in Bolivia. Such factors militate against the government granting extra funds to the universities, as the budget no longer keeps pace with growth in student numbers.

Dr Jorgo Siles Salinas, rector of La Paz University, feels that the university must not be permitted to have more than 15,000 students, though numbers have doubled in the past four years in Bolivia. He is fairly against the creation of such monster universities as those of Mexico City or Buenos Aires, with hundreds of thousands of students, and he feels that when the 15,000 barrier is reached, a new university should be created.

It is likely that the government will agree with him. The gigantic universities of Latin America are invariably institutions of political power rather than places of higher education, and both the present Bolivian government and political reasons, and Dr Salinas for reasons of quality maintenance, do not favour this trend.

Dr Salinas feels that one solution to the problem of the monster university is the creation of polytechnics, but although this solution is in principle by most authorities it is rarely implemented, largely for reasons of status. In Bolivia it is partly because most trained technicians soon emigrate to better paid jobs, as well, though opportunities are beginning to increase at last.

A new overlord body, the National Council of Higher Education, was created with the reforms of 1973, and despite criticism that it is con-

sisting of salaries, equipment and lecture halls, it still exists. A coordinating body was certainly required. In the past, some Bolivian universities did not accept qualifications from others and there was duplication of courses while other subjects were not available anywhere. The reforms envisaged the universities being grouped together in three, one on the Altiplano, one in the Valleys region, and the third in the tropical East, the three complementing each other.

One of the most recent proposals, supported by all the rectors except Dr Salinas and his colleague in the Catholic University of La Paz, Monsiñor Prata, is that the eight universities should all buy computers and course materials, be opposed to the move, which he feels will tend to encourage too many new students to be enrolled, as well as being a waste of money.

It is surprising that Bolivia, with almost the lowest per capita income of Latin America and an illiteracy rate of 70 per cent should aspire to have all its universities equipped with computers.

There is a building programme to locate La Paz University on a new campus. At the moment students are crammed into a tiny block in the centre of the city, or scattered about in makeshift locations. The first faculty to be relocated will be that of exact and natural sciences.

The Catholic University of La Paz is also soon to start a building programme. Its problems are of a different order, as there are only 1,200 students, and courses are offered only in the humanities and social sciences. Nevertheless, the university has frequently played a pilot role in higher education. The grade system now adopted by the national universities were pioneered there. Students are fee-paying, and the university finances itself from this source, and from various inheritances and donations. It also runs a large farm in the eastern part of the country. Its policy is on the one hand to increase fees for those who can afford to pay, while also having a fee-exemption scheme, and offering a small number of grants for needy students.

A new overlord body, the National Council of Higher Education, was created with the reforms of 1973, and despite criticism that it is con-





Here the subcommittee's report is disappointing. It presents a graphic picture of the current problems besetting those attempting to carry out scientific research within the university environment—shortages of money for equipment and building, leading to an inability to meet the well-founded research requirements laid down by the research community. It also points out the or a cultural luxury—by throwing the question back to the universities themselves.

In particular, they suggest that the universities undertake a major study of the "relevance" of their research activities. Given the present demands that the community is placing on the universities—production of scientific knowledge, education, such research as would be both socially and economically

from Mr. Andrew Dunsire.  
Sir.—I should like to support your correspondents D. L. Mun and D. E. Eversley (THES September 5) have said about the inquiry of the new method of dealing with Civil Service College fees and pensions for outside learners.

City Polytechnic, choose to cooperate with our advertising campaign for their own reasons. Judging by the response it was through a surfeit of suitable and able housing.

Yours faithfully,  
**SHIRLEY MEREDYEN,**  
Student Accommodation Services  
London.

Whether even Pāṇini's brahmin contemporaries used Sanskrit for all purposes is doubtful. By that time the vernacular had greatly changed from Sanskrit. The term Sanskrit means "the elaborated"; the languages first derived from it were Prakrits ("common" or "natural" languages); linguists now call the two Old Indo-Aryan and Middle Indo-Aryan respectively.

The first Indian written records to sur-

The author is lecturer in Sanskrit and Palaeography at Oxford University.

It is here that the argument for Sanskrit transcends individual hedonism and reaches political utility. India may be poor, notably in mineral resources, but is she not worth taking seriously?

Whether even Pāṇini's brahmin contemporaries used Sanskrit for all purposes is doubtful. By that time the vernacular had greatly changed from Sanskrit. The term Sanskrit means "the elaborated"; the languages first derived from it were Prakrits ("common" or "natural" languages); linguists now call the two Old Indo-Aryan and Middle Indo-Aryan respectively.

The first Indian written records to sur-

that Sanskrit bore to Latin and Greek a stronger affinity, both in the roots of verbs and in the forms of grammar, than could possibly have been produced by accident; and strong indeed, that no philologist could examine them all three without believing them to have sprung from some common source, which, perhaps, no longer exists".

This was a landmark in the history of European learning and marked the birth of comparative philology.

The author is lecturer in Sanskrit and Pali at Oxford University.

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## Longman



## BOOKS

## Public services

**Social Policy and Citizenship**  
by Julia Parker  
Macmillan, £6.95 and £2.95  
ISBN 0 333 18093 3 and 18094 1

Julia Parker has written an important and stimulating book, one whose contents live up to and excel its dust cover promises. Social policy is defined by the author as "the set of theoretical and working principles in terms of which two broad aspects of society, the supply of and demand for welfare goods and services, are related through public organisation". The book aims "to set out a theoretical approach to the academic study of social policy, to examine British arrangements in terms of that approach, and to point to the problems involved in developing a system which attempts to relate services to need". Within the space of some 175 pages, she makes impressive inroads into each of these areas. She defines her terms, alerts us to the limitations of her case and, whether she is exploring concepts of needs, citizenship, social rights or reciprocity, remains coherent, convincing and undogmatic.

The theoretical context of part one builds up three welfare models, labour, welfare and liberal. The labels are far more than flags of convenience; in each case links are pursued between the picture of the world that each embodies and the associated endorsement or rejection of "public action" as a response to this world view. Here, as in subsequent chapters on kinship, industrialization and social stratification (as determinants of social policy), one is impressed by the distinctions given to established arguments.

We reach part two—with its service by service review—armed with a substantial set of criteria against which to judge the standing and impact of policies in practice; to attempt a systematic distributive analysis. New evidence is not produced, but rather a clear synopsis of the existing data (as the author acknowledges) for what it is worth. Discussion follows of the theoretical base for these allocative/redistributive exercises (which has traditionally been found wanting) and of our failure to evaluate or monitor social policies on a scale in any way comparable to the effort and expense we involve in their delivery. Particularly, the lack of any longitudinal dimension (underestimated in this study) which, elusive as it may be, is so critical to any distributive evaluation.

The final section incorporates exploration of Marshall's citizenship thesis (three extended to embrace democratic control and consumer participation in the planning and administration of social policy) and a reappraisal of Pinter's discussion of reciprocity and stigma.

There is so much to commend in this powerful and unpretentious presentation that criticisms are of omission only. First, a need to complement the distributive analysis (particularly direct ones) are borne where they fall. Second, our economic and social behaviour needs analysing both as "prior states" to which welfare (e.g. income) responses to welfare (e.g. income) distributions which anticipate tax systems). Third, to acknowledge the distributive negatives—the costs of non-receipt of benefits and services (and consequent savings to the government). Finally, citizenship (particularly as it relates to participation) and the conspicuous consumption of welfare (without representation) become equally significant "no representation without taxation." The author has shown her respect to contradict similar questions in this book; hopefully she will do us the future favour of further exploring issues such as these.

Michael Reddin

## Old age reservations

**Social Work, Ageing and Society**  
by C. Paul Brearley  
Routledge and Kegan Paul, £3.95 and £1.95  
ISBN 0 7100 8184 7 and 8185 5

**Socialization to Old Age**  
by Irving Rosow  
University of California Press, £4.90  
ISBN 0 520 02461 3

Both these writers agree in their pessimism. "Our society has no functional place for the old and we have created few acceptable roles for the elderly" writes Brearley in his introductory text for social workers and this is also Professor Rosow's starting point for his exercise in "socialization theory".

No fresh research is presented in either book, both are interpretations and rearrangements of known material. Rosow presents now arguments to support his previous thesis that life would be different for the elderly if they were brought together in dense residential concentrations. Not a recommendation, he would insist, merely a theoretical derivation—but it is hard to know why he returns to the theme if he is not trying to convert us to the power of Indian reservations for old people.

Old age, he argues, involves a transition to lower status for the individual concerned, a social position which is carried out informally. Old age represents a "little case for theory, since writers either on the rise of upward mobility or on downward movement where there are clear social class agencies; here Rosow draws on the extensive sociology of deviance literature. A parallel to becoming an old person, he suggests, is becoming an unmarried mother. Whether or not unmarried mothers would be better living in dense residential concentrations he does not say.

Graham Fennell

## Alive, but not kicking

**The Family Life of Sick Children**  
by Lindy Burton  
Routledge & Kegan Paul, £5.00 and £2.50  
ISBN 0 7100 8171 5 and 8172 3

**A Constant Burden**  
by Margaret Voysey  
Routledge & Kegan Paul, £5.95  
ISBN 0 7100 8183 9

Recent improvements in medical knowledge and treatment have led to a decline in the infant mortality rate. With this battle largely won it has proved possible to investigate the social and emotional needs of the sick and handicapped child at the same time as maintaining standards of physical care. Both of these books are, in their different ways, a part of this relatively new tradition, and it is to be hoped that a consideration of the issues that they raise will quickly become a part of medical education. There is ample evidence here that this is long overdue, though the second book does seem as a warning that the points at issue are far from straightforward.

Lindy Burton concentrates on children with cystic fibrosis, the most common genetic disorder in north-west Europe, which results in the lungs and stomach being blocked and digestion difficult. Unpleasant though the disease may be, the necessary treatment—special diets, antibiotics, twice-daily physiotherapy, and nights spent in a mist tent—can usually be prolonged by the parents at home. Burton's twin aims are to assess the problems faced by these families, and to study the ways in which both parents and children are (or are not) able to surmount the anxieties and stresses which beset them.

The study has a number of positive features: interviews with the fathers and some of the older sick children provide a perspective often lacking in research of this sort, and does the section on the reactions and behaviour of the normal siblings. On the debit side, the absence of a normal perspective as provided by a control group means that at times the child's behaviour may be interpreted as stemming from his illness, whereas similar behaviour is found just as frequently in normal children of the same age. The scheduled nature of the book is also a disadvantage. Research of this kind is heavily dependent upon the quality of the instruments used to collect the data, and the reader needs to be able to judge for himself whether the conclusions drawn are justified in terms of the questions asked.

Apart from the obvious interest that this book holds for those closely concerned with cystic fibrosis, it has much to say that is relevant to any situation involving handicapped or chronically sick people. However, much of the task of abstracting

these generalizations is left to the reader, for the author is weak in pulling strands together and developing the implications of her results.

Margaret Voysey's book is about a similar problem, but it is cast in quite a different mould. She has talked to parents—about 100 very many—about their sick children, but she questions what they say tells us anything about what it is really like to have such a child in the family. Instead she argues that the "public accounts" that parents give which form the basis of research such as Burton's are an attempt to live up to the model of normal child rearing which is expected of them by external social agencies and by other parents. Even though it is highly questionable that there is such a thing as normal parenting there is, nevertheless, an official morality to which agencies concerned with family related activities—particularly the medical and social work professions—subscribe.

This, the author argues, is a long way from explaining why many of these families are so disturbed by the arrival of a sick child. Such families may have a normal respectable appearance because they make appropriate use of the normal family in relating particular "accounts" of their activities. Obvious discrepancies between the situation of the disabled as against the normal family are symbolically transformed so that they appear to affirm the validity of the normal or ideal rearing rather than act as a challenge to it. Thus, uncertainty about the future is said to encourage hope, concentrating on the present appears realistic, and marriages closer than they would otherwise have been.

This is not an easy book to read; the writing is concentrated, and some of the concepts will be unfamiliar to many of the potential readership. The author has not tried to remedy this by using lay terms, but she is right to say, saying it and then saying what she has just said. It is tempting to jump from summary to summary, but this temptation should be resisted if one is to get the full flavour of her argument. A fuller reading may also lead to question whether her sample of families is large enough or representative enough to justify her conclusions.

It would be interesting to "challenge" parents with the arguments in this book. Is it that they have no alternative way of interpreting their experience, or do researchers make too many unwarranted assumptions in constructing the interview schedules? A different research approach, informed by some of Margaret Voysey's ideas, could well pay dividends, and would be the beginning of a new era of research in this area.

Peter Berman

## A social guide

A guide to the literature on British social policy and administration is being published next month by Frances Pinter (Publishers) Ltd at £4.95 and £1.50. *Social Policy and Administration in Britain: a Bibliography* has been compiled by Tessa Blackstone and contains over 2,500 items. The main headings are social security, housing, and environmental policies, education, and health services, the personal social services, social work, comparative social policy, and policies towards minority groups. It is extremely cross-referenced.

## Proceedings

The proceedings of the 1973 and 1974 conferences of the Association of University Teachers of Economics have not been published. The 1973 proceedings, *Contemporary Issues in Economics*, edited by Michael Parkin and A. N. S. Noyes, is published by Manchester University Press at £9.00. The 1974 proceedings, *Current Economic Problems*, edited by Parkin and Noyes, is published by Cambridge University Press, price £7.75.

## BOOKS

## Down and out in Skid Row

**No Fixed Abode**  
by John Stewart  
Manchester University Press, £6.00  
ISBN 0 7190 0560 4

John Stewart's book is concerned with a group who live in dire poverty, those variously described as homeless single men, vagrants or gypsies, who sleep rough or in reception centres or common lodgings. Poverty in general has been persuasively attributed to features of social structure or social policy (by Timmins, Townsend and Atkinson, for example). Some argue, however, that the situation of the "disreputable poor" who inhabit the homeless population there is to be explained in different terms. They claim that such men are incorrigible rogues, degenerate and anti-social, who will continue in this state whatever provision is made for them. Others describe them romantically as the last representatives of the free life in an over-regulated world. More plausible is the view that most homeless single people have been pushed towards their present situation by circumstances: originating mainly within the poorest social groups, their lack of skills and education, their mental, physical and social handicaps ensure that they pay the price of failure in a competitive society. No one explanation is sufficient since "vagrants" are not a homogeneous group. The majority, however, exhibit some form of mental illness, physical handicap or alcoholism.

In what ways do the services of the welfare state attempt to meet their needs? Why do they slip through the welfare net? These are questions to which John Stewart provides a partial answer. He reports the results of his research into the aspects of male vagrancy which involve the personal social services, concentrating on the north-west of England, Manchester in particular.

Stewart's most important finding is essentially a criticism of local authority social services departments. He compares his findings usefully with those of other studies, some difficult to obtain or out of print, thus allowing one to draw conclusions on what is being done and what might be done to improve the bulk of present provision for homeless single men rests with the Supplementary Benefits Commission and comments favourably on their efforts, which take the form of reception centres, cash and voucher payments to clients and grants to voluntary organizations. The main problem lies in the lack of support given to the SBC by other sections of the welfare state.

Stewart's most important finding is essentially a criticism of local authority social services departments.

Skills and Methods in Social Work  
by John Haines  
Constantine, £5.00 and £2.50  
ISBN 0 09 460230 1 and 460220 6

Intended as a basic introduction to social work, this book lays emphasis on the generic elements common to all social work practice. Including work with groups, with communities and in residential institutions as well as the traditional casework with individuals and families. There is no doubt of the need for such books, particularly ones based on British experience, but I have serious doubts about this attempt.

In many ways Haines has been unfortunate in his timing. His book has been published soon after the arrival here of two American books with similar objectives, H. Goldstein's *Social Work Practice: a Generic Approach* (University of South Carolina Press), and Allen Pincus and Annie Minahan's *Social Work Practice: model and method* (Blackwell Publishers). Both were written on the basis of several years' experience of generic teaching. Haines refers to these but only fleetingly and in a way that shows a shallow grasp of the theory that underlies their approach. It is clear that he started writing too soon to learn from their experience. Nor does the value of Haines' book to British social workers must depend on its ability to stand comparison with these works.

An introductory textbook for social work method should meet certain criteria. First it should be "generic" in the sense that it should have a background of experience in any one of the four main areas of social work practice. It should be able to shed its direct relevance on the key to the "Second, the

framework presented must be clear and easily followed. Third, it should be honest and explicit about the extent to which the propositions put forward are based on conventional wisdom rather than validated results, so that readers can be clear how far they need to test these propositions for themselves. Finally, it should lead the student on to further reading.

All three books present rational



An inmate of a Liverpool hostel.

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Stewart's most important finding is essentially a criticism of local authority social services departments.

Susanne Wood

## Practising what is preached

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Haines' claim to be generic rests on very shaky foundations. While he sometimes brings in brief examples from situations involving other approaches, his tone is that of a caseworker. For example, the central chapters on strategies for intervention are almost entirely concerned with interpersonal relationships on a one-to-one or family level. Community work is scarcely dealt with at all except as a supplement to casework. While Goldstein speaks with the professional authority of the caseworker or groupworker he is never as narrow as Haines. In contrast Pincus and Minahan provide a completely fresh approach which is clearly relevant to the whole range of social work and demonstrated by the full cases that they present.

Within the serious limitations of its casework approach, Haines' analytical framework is clear. The book is well written, free of jargon and will be readily comprehensible to all students. If they have a background of casework they will be able to relate it easily to that experience without too much intellectual effort. Both the other books are also clearly written but they are more "generic" in the sense that they have a background of experience in any one of the four main areas of social work practice. It should be able to shed its direct relevance on the key to the "Second, the

All three books present rational

## A Check List of Recent Books

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*A Study of New Policies for the Mentally Handicapped*  
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John Brown, W. J. Cunningham, Julian Roberts, Peter Williams  
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Church Road, Tiptree, Essex



## Chit-chat on this and that

1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26



## BOOKS

## Fair shares

*Reading Rawls: Critical Studies of a Theory of Justice*  
by Norman Daniels  
Blackwell, £7.50 and £3.75  
ISBN 0 631 16390 5 and 16420 0

*Reading Rawls* begins with a substantial editorial introduction; and consists of fourteen essays, ten from the United States and four from the United Kingdom, of which six were specially written for this volume. The collection is divided into four parts: "The Original Position", "Questions of Method", "Principles of Justice", and "Views from the Social Sciences". It is offered as "more than just a representative sample of the first wave of critical response to Rawls' book". It is "a teaching aid and... a guide to further work".

The claim to constitute a representative sample is prejudiced by the facts, that as many as four of the fourteen contributors offer Marxist critiques, and that no one develops a challenge to what in one longer historical perspective must seem the most extraordinary and particular assumption. For, for Rawls, it is just obviously "reasonable" to acknowledge as the first principle of justice one requiring an equal distribution. This substantive moral principle is "so obvious, that we would expect it to occur to any one immediately" (*A Theory of Justice*).

That such an extreme egalitarianism might seem obvious to those in "the Original Position" is, rather, a reason for doubting whether inquiry into the nature of justice is best begun—as Rawls begins—from a hypothetical contract between abstract beings made by stipulation, ignorant of all the particularities which make us humans the individuals we are. For, whatever universal and presumably equal rights we may all be said to have, we certainly do possess, and are subject to, various by no means necessarily equal just claims. These claims, which surely are the primary stuff of justice, are grounded in our past conduct as individuals and in our particular social relations; I deserve this or that because of what I have done or not done; they have claims on me, and I have other claims on them, because they are my daughters or my parents; and so on.

In part one Ronald Dworkin brings out that a merely hypothetical contract can only be an expository device; it cannot, unlike an actual contract, be the basis of an obligation. Thomas Nagel falls below his usual level of interest and inspiration, while Milton Fisk provides little but outbursts of Marcusean rant. No one makes anything of the fact that, though

we are supposed to be dealing with universal moral principles, these are in Rawls both derived from and applied to a single society in isolation. Attention to this oddity might have shown, among other things, that there must be something wrong with an approach which takes it that all possible goods are available for distribution at discretion and with no legitimate prior claims to be recognized. Even those who refuse to recognize private property rights as constituting such entitlements unwillingly concede the essential point by denying to other peoples any just claim to share either British (or Scottish) oil or the hoped for proceeds of further soaking of the British rich.

Part two begins with R. M. Hare's *Critical Notice*. This shows, without actually saying so, that it is discussing a woefully shoddy bit of book construction. Joel Feinberg and David Lyons both deal well with the relations between Rawls and one of the two views to which Rawls sees himself as offering an alternative: utilitarianism and multiple intuitionism, respectively. Gerald Dworkin considers one interesting defence of utilitarianism popular, and it would seem scandalously partisan, ostensible inconsistencies.

The prize piece of part three, by Herbert Hunt, questions the Rawls insistence upon the priority of neither of the famous two fundamental principles of "justice as fairness" can be derived from the Original Position without appeal to an underlying ideal.

In part four A. K. Sen presents a characteristically algebraic confrontation, "Rawls versus Bentham"; while Benjamin Barber doubts even the theoretical potency of those deparliamentized hypothetical contracting parties.

The two Marxist or marxist contributors to part three, Richard Fisk and Norman Daniels, like Milton Fisk earlier and Frank Michelman later, are eager to score defections heavily against capitalism. Yet they contrive not to notice that in none of those now many countries where Labour's old original Clause IV is already law are the most basic liberties of a free society respected, and out in general elections voted for by the masses. But the strongest warrant for so complaining is—say the very least—that the onus of proof must be on anyone who suggests that socialism is in practice compatible with either democracy or the liberties to which Rawls would accord priority.

Antony Flew

## Diplomacy

*Diplomacy in Ancient Greece*  
by Sir Frank Adcock and D. J. Mosley  
Thames & Hudson, £6.50  
ISBN 0 500 40026 1

This new work in the Aspects of Greek and Roman Life series was originally commissioned from Sir Frank Adcock, famous for his editorship and contributions to the *Cambridge Ancient History*; when he died in 1968 he left only part of the manuscript in draft. Dr D. J. Mosley was already working on Greek diplomacy, though from a rather different approach, and he has now prepared Adcock's work for publication as part one of this volume, while adding his own part two of similar length, with 12 pages of selected documents in translation.

It must be said that Mosley's is the more satisfactory part of the book, partly because it deals with the more clearly defined aspects of the subject, the methods, and the institutions of Greek diplomacy, and partly because these aspects have not been so fully examined before.

Here we have the conclusions he has drawn from his careful collection of incidental documentary evidence which happens to survive and from incidental details casually supplied by ancient writers whose main interests lay elsewhere. His account is illustrated by a wealth of examples and copiously supported with references to the ancient sources, but those who want discussion of difficult points will need to go to his *Historia Einzelschrift* on *Envoys and Diplomacy in Ancient Greece*.

The Greeks had no special word for ambassadors and they did not recognize diplomacy as a separate branch of statecraft, but there was plenty of it, leading to several hundred known interstate treaties. They had no professional diplomats (they had *proxenoi*, who in many ways were the consular representatives of the various states), but they were part-time envoys, and usually used leading public figures for foreign embassies; though, as Mosley shows, they allowed them little scope for initiative; democracy, Athens, for instance, kept the negotiating decisions very much in the hands of the Council of 500 and the Assembly.

Mosley's analytical study neatly complements Adcock's part one, which deals with diplomatic history in the form of a continuous narrative from the sixth century BC to the Roman annexation. But, pity the reader who starts uncertain what exactly is the scope of a diplomatic history may not be the clearer for reading it. In a sense everything about interstate relations can be seen as relevant, for, if diplomacy is the regulation of foreign relations by means other than war, then even some military history can be necessary to show how the circumstances within which diplomacy operated were changed by war. A closer examination of some particular successes and failures of diplomacy is needed, which Adcock would perhaps have gone on to supply.

What does emerge from his narrative (as indeed from Mosley's chapter on the Instruments of Diplomacy) is that our information is very largely confined to the big powers. We know most about the diplomacy of Athens, Sparta and Thebes in their efforts to achieve and maintain positions of dominance; and could remedy the defects of their diplomacy with force majeure, but not always—hence the much greater importance of successful diplomacy than in the fifth century. It is a pity, but know so little of the efforts of small states to make up for their weakness by persuasive talking. Thucydides tells us something of the unsuccessful attempts of Potidaea, Mytilene and Melos to negotiate, with Athens, but how was it, for instance, that Megara in its exposed situation, survived the turn of events of the period 404-338, as in virtual neutrality?

T. B. Ryder



Compton design, last of William Morris's wallpaper designs. For "William Morris" by Jack Lindsay; Constable, £7.50.

## Whig virtues and vices

*Whig Principles and Party Politics: Earl Fitzwilliam and the Whig Party, 1748-1833*  
by E. A. Smith  
Manchester University Press, £9.00  
ISBN 0 7190 0598 1

Viewed simply as a biography of the fourth Earl Fitzwilliam, this is a most impressive and valuable work. All the more striking given the relative paucity of good political biographies dealing with the period. The scholarship is careful and competent, the style lucid and readable, with a wealth of apposite and integrated quotations; the judgment is clear and compelling, and the overall result is a useful addition to our knowledge of the politics of the unreformed system. Its limitations are those of its subject, for as Dr Smith admits, Fitzwilliam was merely a figure of the second rank who never looked like breaking into the first. Though it was his fortune to be the friend of Fox and the patron of Burke, he was never in truth the equal of either of them, impeccably respectable, unfailingly amiable—as Lady Shannon said, "Lord Fitzwilliam was one of the very few men that there is in the opinion of the world"—he lacked any degree of the political flair or judgment which even in the late eighteenth and early nineteenth centuries were necessary components of outstanding success. Only his broad acres, and the political brand of noblesse oblige which he inherited with them, gave him a role of any consequence at all and that was strictly limited.

Except briefly as Viceroy of Ireland in 1795, when the best of his intentions proved unequal to the

political complexities of both Ireland and London, and perhaps earlier while the Whig party was rupturing under the influence of the repercussions of the French Revolution, he was of little importance. He could be said to have poured considerable resources into support for his friends, and poured considerable resources into the cause, especially in York, where he manfully shouldered the burden passed on by Rockingham, whose nephew and heir he was. He was never indispensable, rarely even influential. Dr Smith compares him with Rockingham; the latter had twice been Prime Minister as well as party leader, which Fitzwilliam neither succeeded nor, indeed, aspired to.

It is true that he exemplified Whig virtues, even if he did little to mould them. That moderate reformism and belief in civil and religious liberties associated with traditional Whiggism, were altogether typical of Fitzwilliam's views, permitting, for example, simultaneous support of parliamentary reform and opposition to Petitioning. But there is little that is novel or remarkable about the picture which finally emerges of Fitzwilliam's unexciting life and controversial opinions. Students desire to understand the foundations of the Whig system in the age of the French and industrial revolutions will learn infinitely more from the speeches of Fox or the writings of Burke than the career of Fitzwilliam; those who prefer a painted portrait of a Whig grandee whose active political life spanned the age of Wilkes and of Wellington may profitably turn to this book.

Paul Langford

## Reviewers

Peter Abell has written on organizational theory, model building and inward investment; J. D. Currey is professor of biology at the University of York and is author of *Animal Skeletone*; Joan Byden is at the University of Nottingham and has written *Social Policy in Action* and *The Welfare Society*.

Graham Fennell, who has been engaged in research on old people for ten years, lectures in sociology at the University of East Anglia; Anthony Flew's most recent publication is entitled *Thinking about thinking*.

Anthony Forder is head of the department of social work at Liverpool Polytechnic; Geoffrey Hawthorn lectures in sociology at the University of Cambridge and is author of *The Sociology of Fertility*.

Hans Kruuk's most recent book is *"Hyaena"*; he is principal scientific officer in the Institute of Terrestrial Ecology; John Pantall is associated with health services management education at Manchester Business School; Robert Pinches is professor of sociology at Chelsea College, London; T. B. Ryder is reader in classical studies at the University of Hull and has published *Roine Elreue*, a study of peace and local independence in ancient Greece.

W. T. Welford is professor of zoology at Imperial College, London, and has written research papers on applied optics; Susanne Wood is joint author of *Perceptual aspects of design*, a study of the Cambridge Research Centre; she lectures in zoology at Birkbeck College, London.

## Supporting points

*Structural Materials in Animals*  
by J. H. Brown  
Bunbury, £10.50  
ISBN 0 273 40529 2

There is no comprehensive account of structural materials in animals. It might be expected to do so. For instance, *Florkin's Comprehensive Biochemistry* has three volumes on "extracellular and supporting tissues", but materials treated are dotted randomly around the animal and plant kingdoms, and the multiplicity of authors precludes a coherent account.

Dr Brown has set out to close this gap at least partially. She implies her introduction that she has been of research for twenty years, and a book of this type this can be an advantage: she has no hobby-horses to ride and, apart from an ordinaire fondness for egg cases, the balance of the book is even, particularly as between the phyla. The book treats each phylum about which anything useful can be said, and discusses the supporting issues mainly from the biochemical and structural points of view.

There are a few more general chapters, one on the classes of materials and their properties, one on their decay and one on conclusion. "Structural materials" is interpreted widely, sometimes too much so, as in the excessively long chapter on protozoa. The text refers to a very few papers published after 1973. This delay in publication is unfortunate but no more; it does not greatly diminish the value of the book. The illustrations are copious and useful and the index seems good.

There are, inevitably, many slips

J. D. Currey

## Handy matrices

*Introduction to Matrix Methods in Optics*  
by A. G. A. G. and J. M. D. Burch  
Penguin, £11.00  
ISBN 0 471 29685 6

There are many problems in science and engineering where a sequence of linear recurrence relations or transformations occurs, with two or more physical quantities to be taken through the sequence. A matrix formulation of such problems is convenient, and sometimes it throws new light on the physical principles involved. This book deals with some of the optical applications of matrices. There is an introductory chapter on the elements of matrix algebra, which contains simple operations as far as formalization and the calculation of eigenvalues. It is restricted to matrices of order not greater than four and the corresponding eigenvalues. Then follow four chapters on the selected applications: optical systems, i.e. thin and thick lenses, resonators and laser beams, diffraction, and propagation of light in crystals. There are several appendices, mainly on mathematical formulae, a bibliography of 35 items and a useful index. The treatment of both the mathematics and physics is elementary and there is a useful set of exercises.

The authors state that their purpose is "to encourage the adoption of simple matrix methods in the teaching of optics at the undergraduate and technical college level". This is a laudable aim, but the book is too elementary for an elementary text. The book is well-written in a clear and unadorned style; teachers of science will undoubtedly find many useful ideas from it.

W. T. Welford

## BOOKS

## Elephants

*Elephants and their Habitats: the ecology of elephants in North Bunyoro, Uganda*  
by Dr M. Laws, I. S. C. Parker and R. C. B. Johnston  
Clarendon Press: Oxford University Press, £15.00  
ISBN 0 19 854387 5

Illegal elephant hunting in Africa has escalated rapidly with the huge increase in the price of ivory in the past few years. Poaching is taking place on a scale that is jeopardizing the future of the species. Because of this one of the most important and recently elephants were considered to be pests who wrecked the national parks and riddled peasant smallholdings. The management of elephants—to shoot or not to shoot—has been a contentious issue with well-argued cases on both sides. It is against this earlier background that *Elephants and their Habitats* was written.

The book is a research report on work carried out about ten years ago in Northern Uganda by a zoologist, a hunter-cum-naturalist and an ecologist. It aims to predict future elephant numbers and habitats and changes in the Murchison Falls (now Kabalega) and Bunyoro areas, and it attempts to provide a sound scientific basis for an elephant management policy. It is the first authoritative book on the elephant "problem", and it contains an excellent analysis of a population of mammals, its composition, its trends and its possible future. An important part of the work is based on data from animals killed for the purpose of the research, and to many the idea of the wholesale slaughter of large groups of these magnificent beasts is repugnant. But if the necessity for this killing can be accepted, one cannot help but admire the work from which the authors have drawn their data. In developing methods for determining fecundity, nutrition and physical condition, growth and productivity. There is an array of statistics, elegantly analysed and used to demonstrate an animal population in decline, the rate of decline being pushed to a corner by the advancing human masses. To some extent the elephant numbers are regulated by natural means—in high density areas puberty occurs when animals are seventeen years old compared with the age of ten years elsewhere, and the interval between births increases from three to nine years. Apparently this population control is not enough and the authors' management advice centres on regular culling on a fairly massive scale.

The habitat study makes a case against the idea of the elephant as a destroyer of habitat diversity; it is not conclusive but one could reasonably expect it to be. It seems proved that elephants turned forests into grasslands, but the increasing incidence of fire must also have played an important role, and the few experiments in browsing versus fire enclosure plots are not convincing. Nor do we know what happened to ground water-tables in the area which could have far-reaching effects on tree survival and elephant usage of trees. More work is needed on the elephants' foraging behaviour and food ecology, and on the exclusive role of fire and elephants in large experimental areas.

These criticisms affect the strength of the authors' conclusions rather than the importance of their work. However, I would have been happier if such alternatives had been extensively considered by the authors themselves; as often they appear to have made up their minds. I would have liked a more concise initial definition of the problems, more raw work to put the study on a far wider basis, and the omission of irrelevant information on rainfall and other animals.

Still there are small blemishes in an impressive book, and *Elephants and their Habitats* testifies to an excellent piece of ecological research on a fascinating animal. To conservationists reading the book now its management recommendations have a ring; the advice has been overtaken by local politics and the vagaries of the market price.

Hans Kruuk

## To quell a phobia

*Mathematics for Economists*  
by K. Holden and A. W. Pearson  
David & Charles, £5.50  
ISBN 0 7153 6407 3

For those of us irresistibly overcome by an impulse to reach for the nearest bottle at the slightest suspicion of a mathematical symbol, there is always a need for remedial treatment. Unfortunately few practitioners of the remedial business appreciate the nature of the disease, prescribing remedies which only have the effect of entrenching the initial phobic response. With the seemingly ineluctable drive to quantify the social sciences, particularly economics, it becomes increasingly difficult to encounter an argument that does not at some point resort to mathematical presentation. So for the sake of professional sobriety there is an ever-increasing need of remedial texts, enabling the poor social scientist whose mathematics may have lapsed at 15 or 16, to partake in those esoteric practices calling for some mathematical emphasis.

A number of good texts enjoining the would-be, but laudate, economist to partake in the delights of introductory mathematics are available and must offer severe competition to Holden and Pearson's book. But there is always room for new editions, for the book is not only my experience, never a single text that suits all students. Holden and Pearson seem to have succeeded in providing a text which will be of use to many an aspiring mathematical social scientist (not only

economists) possessing little mathematical background. Starting with simple linear equations, the text progresses with a well-balanced mixture of exposition, examples and exercises, through elementary matrix operations, non-linear equations and series to the differential and integral calculus. Partial differentiation and difference equations are also covered. The presentation (which avoids detailed proofs) is exemplary, and though I am not an economist, I would estimate the chosen examples will motivate the average student. Holden and Pearson want their book to reach an audience whose earlier experiences with mathematics have left them feeling they have little ability at the subject. The exercises, which increase in difficulty as the text progresses, should enable such students to steadily gain in confidence. Answers are provided and on the basis of a random sample of twenty they seem to be correct ones too.

It is, of course, only really possible to evaluate texts of this sort in the classroom where difficulties and ambiguities often become evident. One is characteristically quite taken aback by the nature of what students find difficult; it is all too easy for those with some familiarity with mathematical ways of thinking to make assumptions which to the uninitiated mind are problematic. However, I would wager that Holden and Pearson have produced a text that will be helpful to many.

Peter Abell

## A new and flexible approach to Service Course Teaching in Statistics

Service courses are often something of a problem to Statistics departments. The solution offered here is the use of a programmed text in place of lectures, and a regular practical class at which students work through exercises. Available staff effort can then be placed in helping individuals out of particular difficulties.

*A Programmed Text in Statistics* aims to take students to the use of t, F and chi-squared tests, with some introduction to regression, assuming no knowledge of statistics to start, and to do this in such a way that students attain some degree of understanding of the underlying reasoning.

By covering the basic core material in this way lecturers are free to cover more advanced topics or specialist topics that relate to the specific service course. Alternatively lecture periods can be used to cover more interesting aspects of the subject or case histories.

*A Programmed Text in Statistics* has been produced in four units for greater flexibility. The units are independent and may be used individually. Whether they are used individually or as a set the books form a comprehensive self-tutor which can be used alone or in conjunction with a lecture course.

The main text is programmed and the worked examples are drawn from many fields of application. In addition, separate sets of examples are provided at the end of each section for social scientists, biologists, physical scientists and engineers. This enables students from different faculties to apply the techniques learnt in the text to their own sphere of interest.

At the end of each section a summary is given as a revision aid and to provide a concise source of results derived in the preceding section.

If you teach a Statistics service course and would like to receive an approval copy of *A Programmed Text in Statistics* send your request to: Textbook on Approval Service, Chapman & Hall, North Way, Andover, Hampshire SP10 5BE.

## A Programmed Text in Statistics

J. HINE and G. B. WETHERILL  
Book 1: Summarizing Data 412 13690 B £2.10  
Book 2: Basic Theory 412 13730 B £2.25  
Book 3: The t-test and chi-squared Goodness of Fit 412 13740 D £1.30  
Book 4: Tests on Variance and Regression 412 13760 X £1.76

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**Universities**  
**Kenil**  
 Lecturers: S. Hume (History); J. G. Swainson (Theology); C. M. Gannon (Economics); J. Hume (South-East Asian Studies); C. D. A. Phillips (Quantitative Economics); J. M. Graves-Morris (Applied Mathematics).  
**Oxford**  
 Reader: J. Veyrin-Porret (Bibliography).  
**Suffolk**  
 Reader: Dr J. Clark (Chemistry and applied chemistry).  
**Sussex**  
 Reader: A. A. Dastwood (Law); Lecturers: Mr V. H. Longley-Cook, C. J. Pratt (Law).  
**Polytechnics**  
**Leicester**  
 Head of School of Architecture: R. Conery; Head of Educational Technology: J. L. Clarke.  
**Trent**  
 Reader: J. McIver (Microbiology).  
**Colleges**  
**North London College**  
 Principal: M. Bess.  
**General**  
 Professor Murcia Allentuck, City University of New York and Wollaton College, Oxford, has been elected a fellow of the Royal Society of Arts.  
 Dr John A. Brennan, assistant education officer at Coventry, has been appointed assistant director of education for further education at Wiltshire County Council.

**Chairs**  
 Professor A. B. Atkinson, professor of economics, University of Exeter, has been appointed to the chair of political economy, University College, London, from October 1, 1976.  
 Professor K. Hume, chairman of the department of biochemistry and professor of biochemistry and chemical pharmacology, State University of New York, has been appointed to the Rank chair of physiological biochemistry, Imperial College, London.  
 Professor P. N. Campbell, professor of biochemistry, University of Leeds, has been appointed to the Courant chair of biochemistry, Middlesex Hospital Medical School, from January 1, 1976.  
 Mr R. D. Cooke, reader in geography, University College London, has been appointed to the chair of physical geography, Bedford College, London, from October 1.  
 Mr H. E. M. Taylor, reader in physiology, University of Edinburgh, has been promoted to the chair of applied physiology, Institute of Basic Medical Science, from January 1, 1976.

**Grants**  
**Universities**  
 From the NERC  
**Aberdeen**  
 Botany—£4,085 for a study on micro-bial competition for nutrients in low-energy and anoxic marine environments; active tracers, under the direction of Dr J. P. Blakeman.  
**Bradford**  
 School of Environmental Sciences—£9,390 for the development of the British Lichen Society distribution maps scheme under the direction of Dr M. R. D. Seward.  
**Bristol**  
 Geology—£6,018 for research on the sedimentary processes in the western approach to the Bristol Channel under the direction of Dr R. D. Hamilton.  
 Psychology—£10,601 for a study of the socio-ecology of the magpie under the direction of Dr J. H. Crook.  
 Zoology—£4,391 for research into the ecology of the Chironomidae in the River Chew, under the direction of Dr R. S. Wilson.

**Cambridge**  
 Applied Biology—£3,240 for research into the mechanisms of host-parasite interaction in the louse *Aspidius latidorsus* under the direction of Dr H. J. Harvey.  
 Geodesy and Geophysics—£12,324 for study on the constitution of the earth's deep mantle and core, under the direction of Professor J. A. Jacobs; £9,717 for research into marine geophysics and geodynamics under the direction of Dr D. H. Matthews; £4,271 for research in geophysics, under the direction of Dr R. L. Pringle.  
 Geology—£9,747 for study on the ultra-structure of granitoid and other metamorphic rocks, under the direction of Dr R. B. Rickards.  
 Quaternary research—£23,790 for continued research on oxygen isotope paleoclimatology of the late pleistocene and lower pleistocene, under the direction of Dr N. J. Shackleton.

**Dundee**  
 Biological Sciences—£9,000 for a study on nitrogen fixation by heterotrophic bacteria in sediments of the River Tay, under the direction of Dr R. A. Herbert; £9,196 for research on host-parasite relationships in blue-green algae, under the direction of Dr M. F. J. Delft; £2,100 for research on the effects of blue-green algae on the growth of plants, under the direction of Professor W. D. P. Stewart; £1,750 for research into the possible role of polyphosphates in blue-green algae, under the direction of Professor W. D. P. Stewart.

**UNIVERSITY OF DUNDEE**  
**CENTRE FOR MEDICAL EDUCATION**  
 Applications are invited for the following posts in the Centre, which has expanding research, teaching and service commitments with the University, has a number of externally funded research projects in undergraduate and postgraduate medical education, and under agreements made with the World Health Organization to hold a number of training courses in medical education for medical teachers from within the United Kingdom and from overseas.  
**Lecturer (Clinical) in Medical Education**  
 Applications for this post must be medically qualified with a demonstrable interest in Medical Education. Higher degree qualifications in education and the social sciences will be an advantage. The successful candidate will be expected to contribute to the development of the Centre's research and teaching activities, and to act as a resource for medical teachers in the University.  
**Lecturer/Senior Lecturer in Medical Education**  
 Although the person appointed to this post will be involved in many aspects of the Centre's work, the main responsibilities will relate to the development of the Centre's research and teaching activities, and to the supervision of the Centre's staff. The successful candidate will be expected to contribute to the development of the Centre's research and teaching activities, and to act as a resource for medical teachers in the University.  
**Regional Management Centre—£28,000**  
 from the foundation for Management Education for a programme of research and teaching in management education.

**DEAKIN UNIVERSITY**  
 Geelong, Australia  
**PLANNING DEANS AND ADVISER ON COURSE DEVELOPMENT**  
 The Interim Council of Deakin University wishes to make three professional appointments in 1976, six of which are for posts in the Planning Deans and one who will be the Adviser on Course Development.  
 The University is to provide tertiary courses for students attending persons within and outside the State of Victoria.  
 The University is to enrol students and to offer courses not later than 1976. The University is to enrol students and to offer courses not later than 1976. The University is to enrol students and to offer courses not later than 1976.  
**PLANNING DEANS**  
 Applications are invited for appointment in 1976 in the foundation of the University. The appointees will be the Vice-Chancellor and the Dean of the Faculty of Education. The appointees will be the Vice-Chancellor and the Dean of the Faculty of Education. The appointees will be the Vice-Chancellor and the Dean of the Faculty of Education.

**The British Council**  
 invites applications for the following posts:  
**English Language Adviser (Kuwait)**  
 Medical Faculty, Kuwait University  
 Degree and 3 years' teaching experience essential; TEFL qualification desirable. Required January 1976 or earlier.  
 Salary: £6,995 pa, tax free.  
 Benefits: free accommodation; 2 months annual passage-paid leave. Two-year contract, renewable. 75 AU 92  
**Lecturer in English (Togo)**  
 Department of English, University of Benin, Lomé  
 Special responsibility for Economics and Commerce students.  
 Degree, overseas TEFL/TEFL experience; knowledge of French essential. Preferred age 30-50.  
 Salary: £3,385-£4,264 pa, tax free.  
 Benefits: free accommodation; overseas and children's allowances. Two-year contract, renewable. 75 HU 51  
 Return fares are paid. Local contracts are guaranteed by the British Council.  
 Please write, briefly stating qualifications and length of appropriate experience; quoting relevant reference number for further details and an application form to The British Council (Appointments), 65 Davies Street, London W1V 2AA.

## Open University programmes September 20 to 26

**Saturday September 20**  
 7.00-10.00 Biology: Indicator species (S252) (prog 15).  
 8.05-10.00 The Foundation Course: Signs of the Times (C219) (prog 15).  
 8.30-10.00 Mathematics: Foundation Course: Signs of the Times (C219) (prog 15).  
 8.55-10.00 History of Architecture and Design: The Other Tradition (A205) (prog 15).  
 9.20-10.00 Government and Society: The Other Tradition (A205) (prog 15).  
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**Sunday September 21**  
 7.00-10.00 Introduction to Materials: The Transmission of Information (S252) (prog 15).  
 8.05-10.00 The Foundation Course: Signs of the Times (C219) (prog 15).  
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 8.30-10.00 Mathematics: Foundation Course: Signs of the Times (C219) (prog 15).  
 8.55-10.00 History of Architecture and Design: The Other Tradition (A205) (prog 15).  
 9.20-10.00 Government and Society: The Other Tradition (A205) (prog 15).  
 9.45-10.00 The Other Tradition (A205) (prog 15).  
 10.10-10.30 The Other Tradition (A205) (prog 15).  
 10.35-10.55 Mathematics: Foundation Course: Signs of the Times (C219) (prog 15).  
 11.00-11.20 The Other Tradition (A205) (prog 15).  
 11.25-11.45 The Other Tradition (A205) (prog 15).  
 11.50-12.10 The Other Tradition (A205) (prog 15).  
 12.15-12.35 The Other Tradition (A205) (prog 15).  
 12.40-13.00 The Other Tradition (A205) (prog 15).  
 13.05-13.25 The Other Tradition (A205) (prog 15).  
 13.30-13.50 The Other Tradition (A205) (prog 15).

**RHODES UNIVERSITY**  
 Grahamstown  
 South Africa  
 Applications are invited for the following posts with effect from 1st January, 1976:  
**SENIOR LECTURER/LECTURER in Mathematical Statistics**  
**LECTURER/JUNIOR LECTURER in Mathematical Statistics**  
 The salary scales are:  
 Senior Lecturer — R6,400 x 380-9,900 x 450-11,250 per annum.  
 Lecturer — R4,920 x 180-5,100 x 240-3,000 x 360-8,600 per annum.  
 The initial salary will be determined according to qualifications and experience. A vacation savings bonus is payable and the successful applicant will become a member of the University's pension and medical aid schemes.  
 Further particulars and application forms may be obtained from the Registrar, Rhodes University, Grahamstown, 6140, South Africa, to whom completed applications, with copies of testimonials and a photograph, should be sent by 30th September, 1975.  
 \* Repeated programme.

**ABERYSTWYTH**  
 THE UNIVERSITY COLLEGE  
 DEPARTMENT OF APPLIED MATHEMATICS  
 RESEARCH IN POLYMER  
 Applications are invited for the post of Research Fellow in the Department of Applied Mathematics, University of Wales, Aberystwyth. The successful candidate will be expected to contribute to the development of the Department's research in polymer science and to act as a resource for students and staff.  
 The salary scale is: £5,000-£6,000 per annum.  
 Further particulars and application forms may be obtained from the Registrar, University of Wales, Aberystwyth, 24, Park Street, Aberystwyth, Ceredigion, SY23 2DA, to whom completed applications, with copies of testimonials and a photograph, should be sent by 30th September, 1975.  
**BATH**  
 THE UNIVERSITY  
 School of Electrical Engineering  
 RESEARCH OFFICER  
 Applications are invited for the post of Research Officer in the School of Electrical Engineering, University of Bath. The successful candidate will be expected to contribute to the development of the School's research in electrical engineering and to act as a resource for students and staff.  
 The salary scale is: £5,000-£6,000 per annum.  
 Further particulars and application forms may be obtained from the Registrar, University of Bath, Bath, BA1 1UH, to whom completed applications, with copies of testimonials and a photograph, should be sent by 30th September, 1975.

**RE-ADVERTISEMENT**  
**NATIONAL COLLEGE OF ART & DESIGN, DUBLIN**  
 The Board of the College invites applications from suitably qualified candidates for the following post:  
**LECTURER in the HISTORY and THEORY of DESIGN**  
 Applicants should hold a degree in some aspect of History of Art & Design with specialisation in design, or the theory of design, and preferably a post-graduate qualification. He or she will have had some teaching experience, and a knowledge of the special challenges posed by the art school situation.  
 The Faculty of History of Art and Design & Complementary Studies has been in operation for a short time only, and the successful applicant will be expected to make a considerable contribution to course planning and administration.  
 Salary within the range £4,243 to £6,931.  
 Applications and further particulars may be obtained from:  
 The Secretary,  
 National College of Art & Design,  
 Kildare Street, Dublin, 2, Ireland.  
 Completed forms should be returned not later than 30 October, 1975.  
 Previous applicants need not apply.  
**BIRMINGHAM**  
 THE UNIVERSITY  
 FACULTY OF COMMERCE AND SOCIAL SCIENCES  
 SENIOR LECTURER IN CHARGE OF SOCIAL WORK COURSES  
 Applications are invited for the post of Senior Lecturer in Charge of Social Work Courses, Faculty of Commerce and Social Sciences, University of Birmingham. The successful candidate will be expected to contribute to the development of the Faculty's research in social work and to act as a resource for students and staff.  
 The salary scale is: £5,000-£6,000 per annum.  
 Further particulars and application forms may be obtained from the Registrar, University of Birmingham, Birmingham, B15 2TT, to whom completed applications, with copies of testimonials and a photograph, should be sent by 30th September, 1975.







## PAISLEY COLLEGE

Department of Economics &amp; Management

## Lecturer or Senior Lecturer in Economics

This newly formed department has a vacancy for a LECTURER or SENIOR LECTURER, preferably with experience and ability to teach financial management to degree level. However, economists with specialisms in other related fields will also be considered.

Salary scale—  
Lecturer (Grade A)—£3,216-£6,495  
Senior Lecturer—£6,000-£7,716

Placing dependent on qualifications and experience.

Application forms and further particulars from Establishment Section, Paisley College of Technology, High Street, Paisley, PA1 2BE, quoting ref. THES/30/1. Closing date: Friday, 3rd October, 1975.

## LANCHESTER

THE POLYTECHNIC

FACULTY OF SOCIAL SCIENCES

Lecturer in Economics

This post is for a Lecturer in Economics, to teach the first year course in Economics, and to be responsible for the delivery of the course.

The successful candidate will be expected to take up the post as soon as possible in the autumn of 1976.

The salary scale for this post is £3,216-£6,495.

Applications should be sent to the Director of the Faculty of Social Sciences, Lanchester Polytechnic, Leazes Road, LE1 7TA.

Closing date: Friday, 3rd October, 1975.

Further details and application forms may be obtained from the Director of the Faculty of Social Sciences, Lanchester Polytechnic, Leazes Road, LE1 7TA.

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Closing date: Friday, 3rd October, 1975.

Colleges of Further Education

EDUCATION COMMITTEE

WEST GLAMORGAN INSTITUTE  
OF HIGHER EDUCATION  
APPOINTMENT OF

Principal

Applications are invited from persons with appropriate qualifications and substantial experience in higher/further education for the post of Principal of the West Glamorgan Institute of Higher Education. The Institute will be formed from the merger in September, 1976, of the Swansea College of Education, Swansea College of Technology and Swansea College of Art.

The salary is likely to be initially at a point in the range of Group 7 £10,872-£11,082.

The Authority is seeking to appoint a Principal who will lead the development of the new Institute especially in matters of policy and standards and will have the skills needed to interpret and relate the work of the Institute to education, industry, commerce and the community.

The successful candidate will be expected to take up the post as soon as possible in the autumn of 1976. The Institute will be formed from the merger in September, 1976, of the Swansea College of Education, Swansea College of Technology and Swansea College of Art.

Application forms and further particulars may be obtained from the undersigned on receipt of a stamped addressed foolscap envelope quoting post ref. OF/1.18.75.

Completed applications should be returned not later than Wednesday, 8th October, 1975.

JOHN BEALE, Director of Education  
Education Department, Princess House, Princess Way, SWANSEA.

General Vacancies

NATIONAL YOUTH BUREAU

on behalf of  
Consultative Group on Youth and  
Community Work Training  
invites application for

Professional Adviser

for the  
Co-Ordination and Validation on In-Service Training  
for Youth and Community Service Personnel

A Panel, representative of all interests concerned, is being established to carry out this task on behalf of the Consultative Group at the invitation of the D.E.S. It requires the services of a Professional Adviser. The person appointed will have experience in the education and training of youth and community and allied workers and be able to make a professional judgement on the whole range of courses within the Panel's concern.

The possibility of secondment may be considered.  
Salary within first four points of new H/E Principal Lecturers scale (£5,940-£8,642).

Further details and application forms to be returned by 22nd September, 1975 from: Director, National Youth Bureau, 17-23, Abbot Street, Leicester (LE1 3B811).

DORSET

Institution of Higher Education  
Appointment of

DIRECTOR

Applications are invited from graduates with substantial experience in the fields of higher and/or further education and who hold or have held posts carrying senior management responsibilities with a college. The salary scale is likely to be that appropriate to a Group 9 College.

This new institution will be formed from an amalgamation of the advanced work of the Bournemouth College of Technology with the Weymouth College of Education. The Authority are looking for a person of proven ability, with energy and vision, capable of developing sound and imaginative long term plans but also conscious of the immediate demands of the present educational situation.

Application forms and further particulars may be obtained from R. D. PRICE, B.A., County Education Officer, County Hall, Dorchester, Dorset DT1 1XJ. Closing date for the receipt of applications will be 25th September.

General Vacancies

DIRECTOR

Kent Council on Alcoholism  
Salary £6,245-£8,411

The Kent Council on Alcoholism, formed in 1975, is now looking for its first Director to develop and co-ordinate the work of the Council in Kent. The main function of the Council is to initiate educational and advisory services on Alcoholism and to organise a counselling and guidance service for people suffering directly or indirectly with alcohol problems. The applicants should be qualified in one of the following fields: education, social work, probation, nursing or management. A full job description and application form, which should be returned within 14 days, are available from The Secretary, Kent Council on Alcoholism, 10, Canterbury Road, Canterbury, Kent, CT1 3JL.

Courses

CITY OF LONDON POLYTECHNIC

Sir John Cass School of  
Science and Technology

Part-time MSc Courses

are available in:

Chemical Spectroscopy

Corrosion Science and Engineering

Materials Selection

Mathematics

Neurophysiological Basis of Behaviour

Optical and Dielectric Polymer Science

Physical Research Techniques

Solid State Physics/Thin Film Physics (Modular Course)

Qualifying courses and examinations are available for some of these courses.

Full-time courses with SRC student-ship are available.

Full details and application forms are available from:

The Academic Registrar  
Administrative Headquarters  
117-119 Houndsditch  
London EC3A 7BU

Telephone 01-283 1030

THE TIMES HIGHER EDUCATION SUPPLEMENT 29.9.75

Maturity points to validation partnership

Objective

The objective of this paper is to propose a development in the relationship between the council and its associated institutions. It envisages that particular institutions should be authorized to carry out the main validation procedures leading to the council's approval of courses in their well established subject areas, which might eventually be all their subject areas; their freedom to exercise subject to a quinquennial review.

At this review the institution's representatives would discuss with the council the progress made in the previous five years and their intentions for the next five, and would seek confirmation of extension of the responsibilities vested in them by the council.

The changes, for which a timetable is proposed, would in the council's view produce a system which in its essential features could be satisfactory for a considerable time, and though there would be changes in its detailed provisions. The system would bring about a close association between the council itself and the institutions in which academic strength would be recognized and aspirations for academic freedom not in a way different from the traditional one of creating wholly autonomous chartered institutions.

For two reasons the council believes the time to be ripe for a move towards granting more responsibility for the validation of its courses to those institutions which it judges to be ready to assume it.

First, the council recognizes the existence within a number of institutions of high quality academic staff, experience, maturity, constructive self-criticism, and effective and thorough academic decision making processes. Secondly, the council wishes to encourage the continued development in institutions of self-criticism and the assumption of responsibility for submission to be made to the council by procedures internal to the institutions.

Colleges of Education

DURHAM

THE UNIVERSITY  
INSTITUTE OF EDUCATION  
COLLEGES OF EDUCATION

Applications are invited for the post of Director of the Institute of Education, Durham University, to develop and co-ordinate the work of the Institute in Durham and to represent the Institute in the North-East of England.

The Director will be responsible for the development of the Institute and for the recruitment and training of staff. He will also be responsible for the financial management of the Institute.

Further particulars may be obtained from the Director of Education, Durham University, Leazes Road, Durham, DH1 1TA.

Closing date: Friday, 3rd October, 1975.

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For two reasons the council believes the time to be ripe for a move towards granting more responsibility for the validation of its courses to those institutions which it judges to be ready to assume it.

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Colleges of Education

DURHAM

THE UNIVERSITY  
INSTITUTE OF EDUCATION  
COLLEGES OF EDUCATION

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The Council for National Academic Awards has produced a discussion paper, *Partnership in Validation*, which suggests increased internal validation of courses to match growing academic maturity. Extracts from the document are printed below.

concepts in the proposals: the specification of subject areas by the council; the extent of the authority for the institution in these specified